INTERNATIONAL STANDARD

IEC 61360-4

Second edition
2005-03

Standard data element types with associated classification scheme for electric components –

Part 4: IEC reference collection of standard data element types and component classes

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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STANDARD DATA ELEMENT TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC COMPONENTS –

Part 4: IEC reference collection of standard data element types and component classes

FOREWORD

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International Standard IEC 61360-4 has been prepared by subcommittee 3D: Data sets for libraries of IEC technical committee 3: Information structures, documentation and graphical symbols.

This second edition cancels and replaces the first edition published in 1997. This second edition contains all data element type and class definitions from the first edition with an updated classification scheme and new definitions in the area of:

a) the geometrical characteristics of the shapes of components, including figures and drawings;
b) the characteristics for semiconductor die;
c) data element types originating from the JEITA dictionary in Japan.

It establishes a classification and coding system of shapes for package outlines of electric and electromechanical components according to key geometrical characteristics.

The object of this addition to the standard is to define the information required on the shapes of components :

- for the design of component lands, footprints and piercing drawings;
- for determining the space occupied;
- for deriving dimensions and tolerances needed for automatic handling by inserters and onserters;
- to provide a classification scheme for the purposes of retrieval, selection and comparison of component shapes;
- to establish a coding system for identification of component package outlines;
- to provide a set of reference drawings for defining shape, size and relative position of the component body, mounting features, terminals and adjusters;
- to provide a set of data element type definitions for geometrical parameters in computer-sensible form.

This second edition extends the classification scheme and DET definitions with unpackaged and minimally packaged semiconductor die, with or without connection structures. It is a data specification which defines the requirements for

- product identity;
- product data;
- die mechanical information;
- test, quality and reliability information;
- handling, storage and mounting information;
- thermal data and electrical simulation data.

This second edition extends the classification and DET definitions with new entries originating from the JEITA dictionary, Japan.

The text of this standard is based on the following documents:

FDIS	Report on voting
3D/134/FDIS	3D/136/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

IEC 61360 consists of the following parts, under the general title *Standard data element types with associated classification scheme for electric components*:

- Part 1: Definitions – Principles and methods
- Part 2: EXPRESS Dictionary schema
- Part 3: Maintenance and validation procedures
- Part 4: IEC reference collection of standard data element types and component classes
- Part 5 Extensions to the EXPRESS dictionary schema

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The contents of this docment is in line with the current contents of the IEC online 61360 Component Data Dictionary.

a) The complete classification scheme is given in Annex A.

b) The new/amended data element types with their identifier, as listed below, are given in Annex C.

AAD001-001
AAD002-001
AAD003-001
AAD004-001
AAD005-001
AAD006-001
AAD007-001
AAD008-001
AAD009-001
AAD010-001
AAD011-001
AAD012-001
AAD013-001
AAD014-001
AAD015-001
AAD016-001
AAD017-001
AAD018-001
AAD019-001
AAD020-001
AAD021-001
AAD022-001
AAD023-001
AAD024-001
AAD025-001
AAD026-001
AAD027-001
AAD028-001
AAD029-001
AAD030-001
AAD031-001
AAD032-001
AAD033-001
AAD049-001
AAD054-001
AAD055-001
AAD056-001
AAD060-001
AAD070-001
AAD071-001
AAD072-001
AAD078-001
AAD081-001
AAD082-001
AAD085-001
AAD086-001
AAD087-001
AAD088-001
AAD089-001
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AAD137-001
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AAD142-001
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AAD149-001
AAD150-001
AAD151-001
AAD153-001
AAD154-001
AAD155-001
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AAD157-001
AAD158-001
AAD159-001
AAD160-001
AAD161-001
AAD162-001
AAE000-001
AAE002-006
AAE003-006
AAE004-007
AAE060-006
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AAE351-006
AAE545-006
AAE618-005
AAE635-001
AAE878-005
AAF101-006
AAF311-007
AAF390-002
AAF464-001
AAF465-001
AAF466-001
AAF467-001
AAF468-001
AAF469-001
AAG000-001
AAG001-001
AAG002-001
AAG003-001
AAG004-001
AAG005-001
AAG006-001
AAG007-001
AAG008-001
AAG009-001
AAG010-001
AAG011-001
AAG012-001
AAG013-001
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AAG024-001
AAG025-001
AAG026-001
AAG027-001
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AAG029-001
AAG030-001
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AAG041-001
AAG042-001
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AAG066-001
AAG067-001
AAG068-001
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AAG076-001
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AAG084-001
AAG085-001
AAG086-001
AAG087-001
AAG088-001
AAG089-001
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AAG092-001
AAG093-002
AAG094-002
AAG095-001
AAG096-001
AAG097-001
AAG098-001
AAG099-001
AAG100-001
AAG101-001
AAG102-001
AAG103-001
AAG104-001
AAG105-001
AAG107-001
AAG108-001
AAG109-001
AAG110-001
AAG111-001
AAG112-001
AAG113-001
AAG114-001
AAG115-001
AAG116-001
AAG117-001
AAG118-001
AAG119-001
AAG120-001
AAG121-001
AAG122-001

AAG123-001	AAJ020-001	AAJ046-001	AAJ073-001	AAJ100-001
AAG124-001	AAJ021-001	AAJ047-001	AAJ074-001	AAJ101-001
AAG125-001	AAJ022-001	AAJ048-001	AAJ075-001	AAJ102-001
AAG129-001	AAJ023-001	AAJ049-001	AAJ076-001	AAJ103-001
AAG130-001	AAJ024-001	AAJ051-001	AAJ077-001	AAJ104-001
AAG131-002	AAJ025-001	AAJ052-001	AAJ078-001	AAJ105-001
AAG133-002	AAJ026-001	AAJ053-001	AAJ079-001	AAJ106-001
AAH005-001	AAJ027-001	AAJ054-001	AAJ080-001	AAJ107-001
	AAJ028-001	AAJ055-001	AAJ081-001	AAJ108-001
AAJ001-001	AAJ029-001	AAJ056-001	AAJ082-001	AAJ109-001
AAJ002-001	AAJ030-001	AAJ057-001	AAJ083-001	AAJ110-001
AAJ003-001	AAJ031-001	AAJ058-001	AAJ084-001	AAJ111-001
AAJ004-001	AAJ032-001	AAJ059-001	AAJ085-001	AAJ112-001
AAJ006-002	AAJ033-001	AAJ060-001	AAJ086-001	AAJ113-001
AAJ007-001	AAJ034-001	AAJ061-001	AAJ087-001	AAJ114-001
AAJ008-001	AAJ035-001	AAJ062-001	AAJ088-001	AAJ115-001
AAJ009-001	AAJ036-001	AAJ063-001	AAJ089-001	AAJ116-001
AAJ011-001	AAJ037-001	AAJ064-001	AAJ090-001	AAJ117-001
AAJ012-002	AAJ038-001	AAJ065-001	AAJ091-001	AAJ118-001
AAJ013-001	AAJ039-001	AAJ066-001	AAJ092-001	AAJ119-001
AAJ014-001	AAJ040-001	AAJ067-001	AAJ093-001	AAJ120-001
AAJ015-001	AAJ041-001	AAJ068-001	AAJ094-001	AAJ121-001
AAJ016-001	AAJ042-001	AAJ069-001	AAJ095-001	AAJ122-001
AAJ017-001	AAJ043-001	AAJ070-001	AAJ096-001	AAJ123-001
AAJ018-001	AAJ044-001	AAJ071-001	AAJ098-001	AAJ124-001
AAJ019-001	AAJ045-001	AAJ072-001	AAJ099-001	

c) The new/amended classes with their identifier, as listed below, are given in Annex B.

AAA000-001	AAA307-001	AAA349-001	AAA384-001	AAA420-001
AAA002-003	AAA308-001	AAA350-001	AAA385-001	AAA421-001
AAA021-003	AAA309-001	AAA351-001	AAA386-001	AAA422-001
AAA026-002	AAA311-001	AAA352-001	AAA387-001	AAA423-001
AAA031-002	AAA312-001	AAA353-001	AAA388-001	AAA424-001
AAA056-002	AAA313-001	AAA354-001	AAA389-001	AAA426-001
AAA074-002	AAA314-001	AAA355-001	AAA390-001	AAA427-001
AAA077-002	AAA318-001	AAA356-001	AAA391-001	AAA428-001
AAA089-002	AAA319-001	AAA357-001	AAA392-001	AAA429-002
AAA092-001	AAA320-001	AAA358-001	AAA393-001	AAA430-002
AAA093-002	AAA322-001	AAA359-001	AAA394-001	AAA431-002
AAA096-002	AAA323-001	AAA360-001	AAA395-001	AAA432-002
AAA098-002	AAA324-001	AAA361-001	AAA396-001	AAA433-002
AAA100-003	AAA325-001	AAA362-001	AAA397-001	AAA434-002
AAA102-002	AAA326-001	AAA363-001	AAA398-001	AAA435-001
AAA115-002	AAA327-001	AAA364-001	AAA399-001	AAA436-001
AAA147-003	AAA328-001	AAA365-001	AAA400-001	AAA437-001
AAA148-002	AAA329-001	AAA366-001	AAA401-001	AAA438-001
AAA149-002	AAA330-001	AAA367-001	AAA402-001	AAA439-001
AAA174-002	AAA332-001	AAA368-001	AAA403-001	AAA440-001
AAA218-002	AAA333-001	AAA369-001	AAA404-001	AAA441-001
AAA229-001	AAA334-001	AAA370-001	AAA405-001	AAA442-001
AAA230-001	AAA335-001	AAA371-001	AAA406-001	AAA443-001
AAA231-001	AAA336-001	AAA372-001	AAA407-001	AAA444-001
AAA232-001	AAA337-001	AAA373-001	AAA408-001	AAA445-001
AAA295-001	AAA339-001	AAA374-001	AAA409-001	AAA446-001
AAA296-001	AAA340-001	AAA375-001	AAA410-001	AAA447-001
AAA297-001	AAA341-001	AAA376-001	AAA411-001	AAA448-001
AAA298-001	AAA342-001	AAA377-001	AAA412-001	AAA449-001
AAA299-001	AAA343-001	AAA378-001	AAA413-001	AAA450-001
AAA301-001	AAA344-001	AAA379-001	AAA414-001	AAA451-002
AAA302-001	AAA345-001	AAA380-001	AAA415-001	AAA452-001
AAA303-001	AAA346-001	AAA381-001	AAA417-001	AAA453-002
AAA304-001	AAA347-001	AAA382-001	AAA418-001	AAA454-001
AAA305-001	AAA348-001	AAA383-001	AAA419-001	AAA455-001

AAA456-001	AAA525-001	AAA550-001	AAA579-001	AAA597-001
AAA501-001	AAA526-001	AAA551-001	AAA580-001	AAA601-001
AAA502-001	AAA527-001	AAA554-001	AAA581-001	AAA602-001
AAA503-001	AAA528-001	AAA555-001	AAA582-001	AAA603-001
AAA504-001	AAA536-001	AAA556-001	AAA583-001	AAA604-001
AAA505-001	AAA537-001	AAA557-001	AAA584-001	AAA605-001
AAA509-001	AAA538-001	AAA561-001	AAA585-001	AAA606-001
AAA510-001	AAA539-001	AAA562-001	AAA586-001	AAA607-001
AAA511-001	AAA540-001	AAA563-001	AAA587-001	AAA608-001
AAA512-001	AAA541-001	AAA564-001	AAA588-001	AAA609-001
AAA513-001	AAA542-001	AAA565-001	AAA589-001	AAA610-001
AAA514-001	AAA543-001	AAA566-001	AAA590-001	AAA611-001
AAA516-002	AAA544-001	AAA569-001	AAA591-001	AAA612-001
AAA517-001	AAA545-001	AAA572-001	AAA592-001	AAA613-001
AAA518-001	AAA546-001	AAA573-001	AAA593-001	
AAA522-001	AAA547-001	AAA575-001	AAA594-001	
AAA523-001	AAA548-001	AAA576-001	AAA595-001	
AAA524-001	AAA549-001	AAA578-001	AAA596-001	

d) The new/amended drawings with their identifier, as listed below, are given in Annex D.

DAA001-001	DAA012-001	DAA023-001	DAA034-001	DAA045-001
DAA002-001	DAA013-001	DAA024-001	DAA035-001	DAA046-002
DAA003-001	DAA014-001	DAA025-002	DAA036-001	DAA047-001
DAA004-001	DAA015-001	DAA026-002	DAA037-001	DAA048-002
DAA005-001	DAA016-001	DAA027-002	DAA038-001	DAA049-001
DAA006-001	DAA017-001	DAA028-002	DAA039-001	DAA050-001
DAA007-001	DAA018-001	DAA029-002	DAA040-001	DAA051-001
DAA008-001	DAA019-001	DAA030-002	DAA041-001	
DAA009-001	DAA020-001	DAA031-001	DAA042-001	
DAA010-001	DAA021-001	DAA032-001	DAA043-001	
DAA011-001	DAA022-001	DAA033-001	DAA044-001	

e) The new/amended figures with their identifier, as listed below, are given in Annex E.

.

DAE001-001	DAE004-001	DAE012-001	DAE042-001
DAE002-001	DAE005-001	DAE021-001	DAE092-001
DAE003-001	DAE009-001	DAE040-001	DAE119-001

STANDARD DATA ELEMENT TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC COMPONENTS –

Part 4: IEC reference collection of standard data element types and component classes

1 General

1.1 Scope and object

This part of IEC 61360 specifies within two dictionaries:

- the definitions of data element types for electric components and materials used in electrotechnical equipment and systems;
- the definitions of the component classes with associated classification scheme.

These definitions are related to electric components including electronic and electromechanical components and materials used in electrotechnical equipment and systems.

The object of this standard is to provide a set of uniquely-identified data element types with

- an unambiguously defined meaning;
- a defined value format, and
- a prescribed value domain for the non-quantitative data element types.

The classification scheme for components, the component class definitions (whereby the relevant and the valid characteristic properties by specific data element types are assigned to each class of components) are used to define the data element types unambiguously and to make the entire set of data element types manageable.

The collection of data element types from this standard are meant for use in computerized systems for component selection and component management, parts list processing and computer-aided design, -manufacturing and -testing

1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050(702): 1992, *International Electrotechnical Vocabulary – Chapter 702: Oscillations, signals and related devices*

IEC 60191-4:1999, *Mechanical standardization of semiconductor devices – Part 4: Coding system and classification into forms of package outlines for semiconductor device packages*

IEC 61360-1: 2002, *Standard data element types with associated classification scheme for electric components – Part 1: Definitions – Principles and methods*

ES 59008-1, *Data requirements for semiconductor die – Part 1: General requirements*

ES 59008-2, *Data requirements for semiconductor die – Part 2: Vocabulary*

ES 59008-3, *Data requirements for semiconductor die – Mechanical, material and connectivity requirements*

ES 59008-4 (all parts), *Data requirements for semiconductor die – Specific requirements and recommendations*

ES 59008-5 (all parts), *Data requirements for semiconductor die – Particular requirements and recommendations for die types*

ES 59008-6-1, *Data requirements for semiconductor die – Part 6-1: Exchange data formats and data dictionary – Data exchange – DDX file format*

2 Terms and definitions

For the purposes of this document, the terms and definitions as given in clause 2 of IEC 61360-1, the terms and definitions of ES 59008-2 as well as the following apply.

2.1
shape
external form of a component package as given by the set of data element types

2.2
seating plane
theoretical plane of an electric component that coincides with the surface of the board if the component rests in its intended mounted position on the board

NOTE 1 This is often used as the reference plane.

NOTE 2 Not all components have a seating plane.

2.3
terminal
conductor that serves to connect a device electrically and/or mechanically with its environment

2.4
terminal form
form of a terminal of a package

2.5
terminal position
alignment of the physical position of the ends of the terminals of a component package

2.6
outline style
physical information enclosing the apparently plane figure presented by any object in sight, contour and/or external boundary of a component

2.7
true
qualifies the ideal value which characterises a quantity perfectly defined in the conditions which exist at the moment at which that quantity is observed, or the subject of a determinal

NOTE This value could be arrived at only if all causes of measurement error were eliminated and the population was infinite. In the case of a finite population, the complete population must be considered.

2.8
true value
value which characterises a quantity perfectly defined, in the conditions which exist when that value is examined

NOTE The true value of a quantity is an ideal concept and, in general, it cannot be known.

2.9
package
enclosure for one or more chips, film elements or other components, that allows electrical connection and provides mechanical and environmental protection

2.10
case
enclosure for one or more chips, film elements or other components, that allows mechanical connection and provides mechanical and environmental protection

2.11
mounting hole
hole in a mounting structure for mechanical connection and support

2.12
mounting socket
connector which intends to provide electrical and mechanical support for a component inserted into it

3 Maintenance and validation methodology

The collection of entities as defined in this standard is a dynamic collection which needs actively to be maintained.

IEC 61360-3 specifies the procedures that shall be followed by the validation agency and the maintenance agency of the IEC vocabulary of standard technical data element types with associated classification scheme and component classes as defined by this classification scheme.

4 How to read the annexes

4.1 Classification tree

In Annex A, the complete classification tree is given. Under the header '**Class**', the identifier of the class at that specific line is given, while under the header '**Class. DET**', on that line the identifier of the classifying data element type is given that has been used to define that class.

If relevant, under the header **'Drawing'** the identifier of the drawing related to the indicated **'Class'** is given.

4.2 Classes

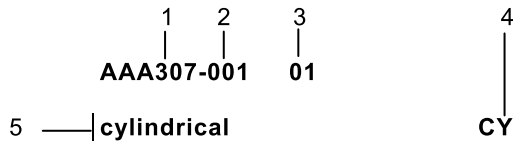
For the classification of components[2] the principle of dividing the whole set of components into parts has been applied repeatedly, thereby creating a hierarchical tree of several levels of classes.

The goal of this classification scheme of components is to arrange the data element types in an unambiguous-structured way. A detailed description of the classification principles and the various attributes of the component class definitions are given in IEC 61360-1.

The various attributes of the component classes and the layout as used in this standard are explained with the aid of Figure 1a and Figure 1b. The class definitions are given in Annex B.

---

2 The classification principles are also applicable to other entities like materials, packages, geometries, etc.



5 **cylindrical**

6 A set of cylindrical package outline styles of which each outline style can be described with the same set of data element types.

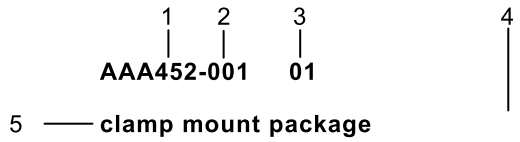
7 NOTE
CYLINDRICAL is a package style in which the body is cylindrical with the length no smaller than the diameter.

8 **AAG056-001 terminal position code**

9 **Subclasses**

AAA325-001	axial leads
AAA326-001	bottom leads
AAA327-001	end connections
AAA328-001	radial leads
AAA329-001	uppers connections

Figure 1a



5 **clamp mount package**

6 A set of clamp-mount cylindrical package outline styles with screw terminals in standard form on the upper surface of which each outline style can be described with the same set of data element types.

11 DAA047-001

10 **Properties**

AAG001-001	seated height
AAG008-001	terminal width
AAG012-001	terminal thickness
AAG014-001	package diameter
AAG017-001	terminal spacing
AAG092-001	package height zone
AAG094-001	terminal thread diameter
AAG097-001	terminal thread

12 IEC******

Figure 1b

1 Code
2 Version number
3 Revision number
4 Coded name
5 Preferred name
6 Definition
7 Note
8 Classifying data element type
9 Subclasses, identifier + preferred name
10 Applicable data element types, identifier + preferred name
11 Drawing reference, identifier
12 Source document of package class definition

Figure 1 – Component package class specification attributes

For the classification of the shapes of package outlines, the following three characteristics of the package according to the codes defined in IEC 60191-4 are used:

- outline style ;
- terminal position;
- terminal form.

Following these characteristics, four or five levels of classification are then defined. The codes used are given as informative annexes to this standard as follows :

- Clause G.1: level 1 : identified by the outline style codes from Table G.1;
- Clause G.2: level 2 : identified by the terminal position codes from TableG.2;
- Clause G.3: level 3 : identified by the terminal form codes from Table G.3;
- Clause G.4 level 4 : identified by the terminal variant codes from Table G.4; and
- Clause G.5: level 5 : (optional) identified by the body variant codes from Table G.5.

4.3 Data element types

Various attributes of the data element types and the layout as used in this standard are explained with the aid of Figure 2. For a detailed description of the various attributes of the data element type definitions, see IEC 61360-1.

The data element type definitions are given in Annex C.

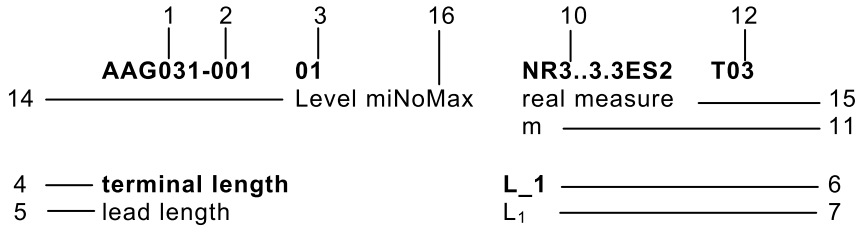


Figure 2a

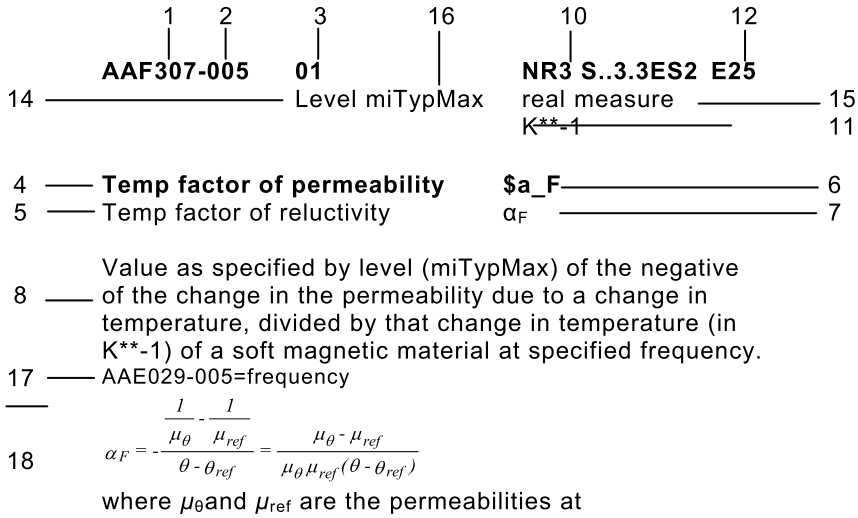


Figure 2b

1	Code	10	Value format
2	Version number	11	Unit of measure
3	Revision number	12	Data element type class
4	Preferred name	13	Source document of data element type definition
5	Synonymous name	14	Data type
6	Short name	15	Data value
7	Preferred letter symbol	16	Level
8	Definition	17	Condition
9	Note	18	Formula

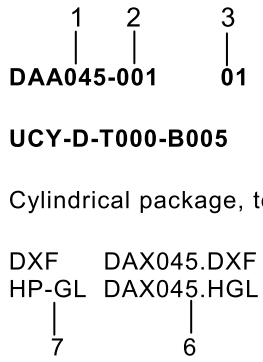
Figure 2 – Data element type specification attributes

4.4 Drawings

A drawing illustrates the meaning of a class containing a group of data element types describing the geometrical characteristics of a component.

The various attributes of the drawings and the layout as used in this standard are explained with the aid of Figure 3. For a detailed description of the various attributes of the data element type definitions, see IEC 61360-1.

The drawing definitions are given in Clause D.1 while the drawing of the packages themselves are given in Clause D.2.



1 Code
2 Version number
3 Revision number
4 Drawing title
5 Descriptive designator
6 File name
7 File format

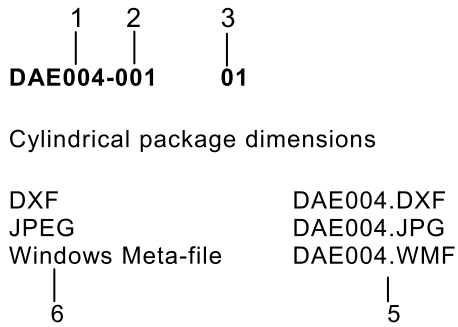
Figure 3 – Drawing specification attributes

4.5 Figures

A figure is an illustration that clarifies the meaning of the definition of a data element type.

The various attributes of the figure and the layout as used in this standard are explained with the aid of Figure 4. For a detailed description of the various attributes of the data element type definitions, see IEC 61360-1.

The figure definitions are given in Clause E.1 while the figures themselves are given in Clause E.2.



1 Code
2 Version number
3 Revision number
4 Descriptive designator
5 File name
6 File format

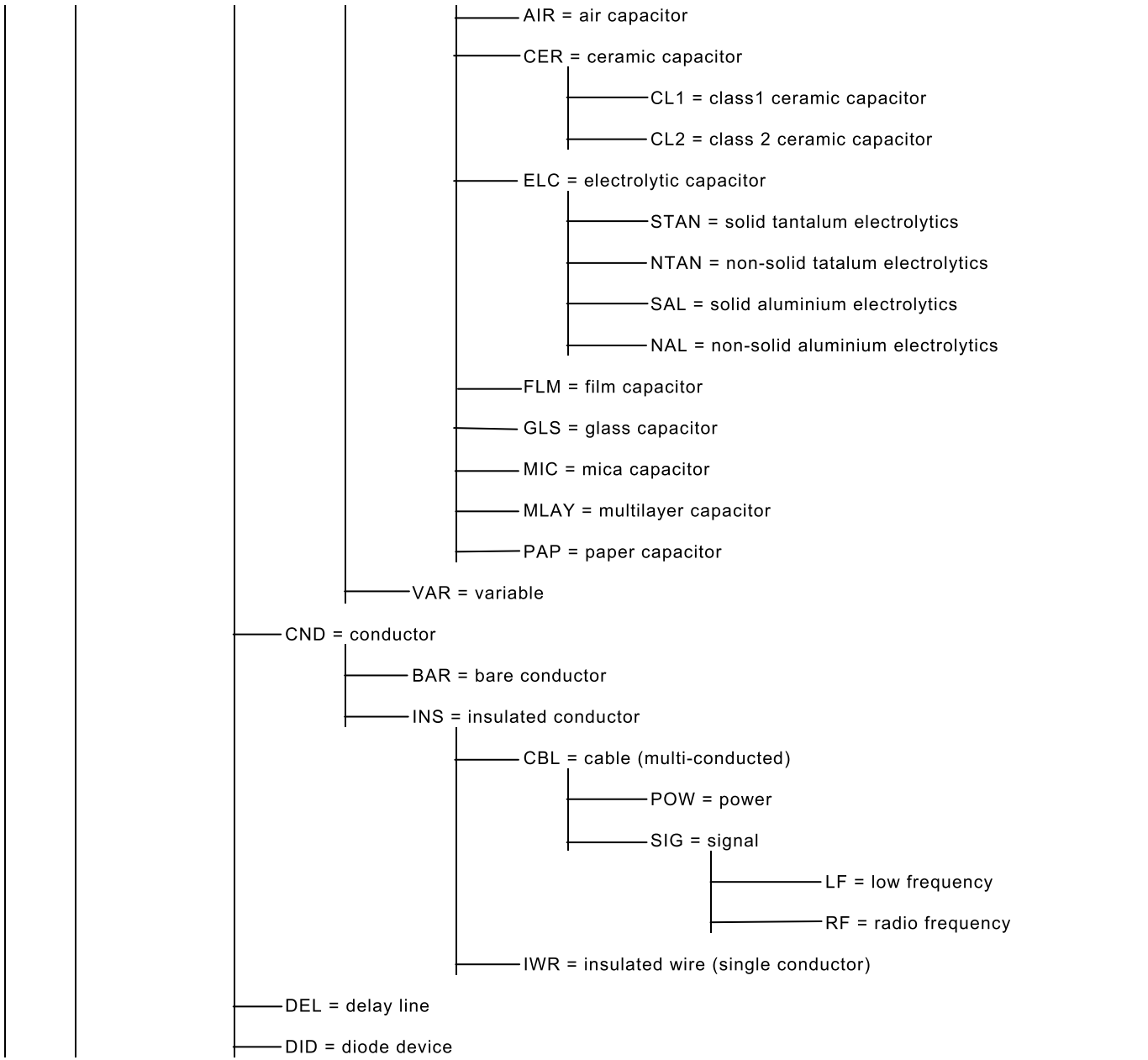
Figure 4 – Figure specification attributes

4.6 Index on keywords

To facilitate an easy way of searching, in Annex F an index on keywords from the preferred name of data element types and condition data element types is given. Here, the keywords are presented in tabular form with the keyword in the left column, the identifying code of the class of the data element type in which the keyword appears in the column on the right and the corresponding preferred name in the middle.

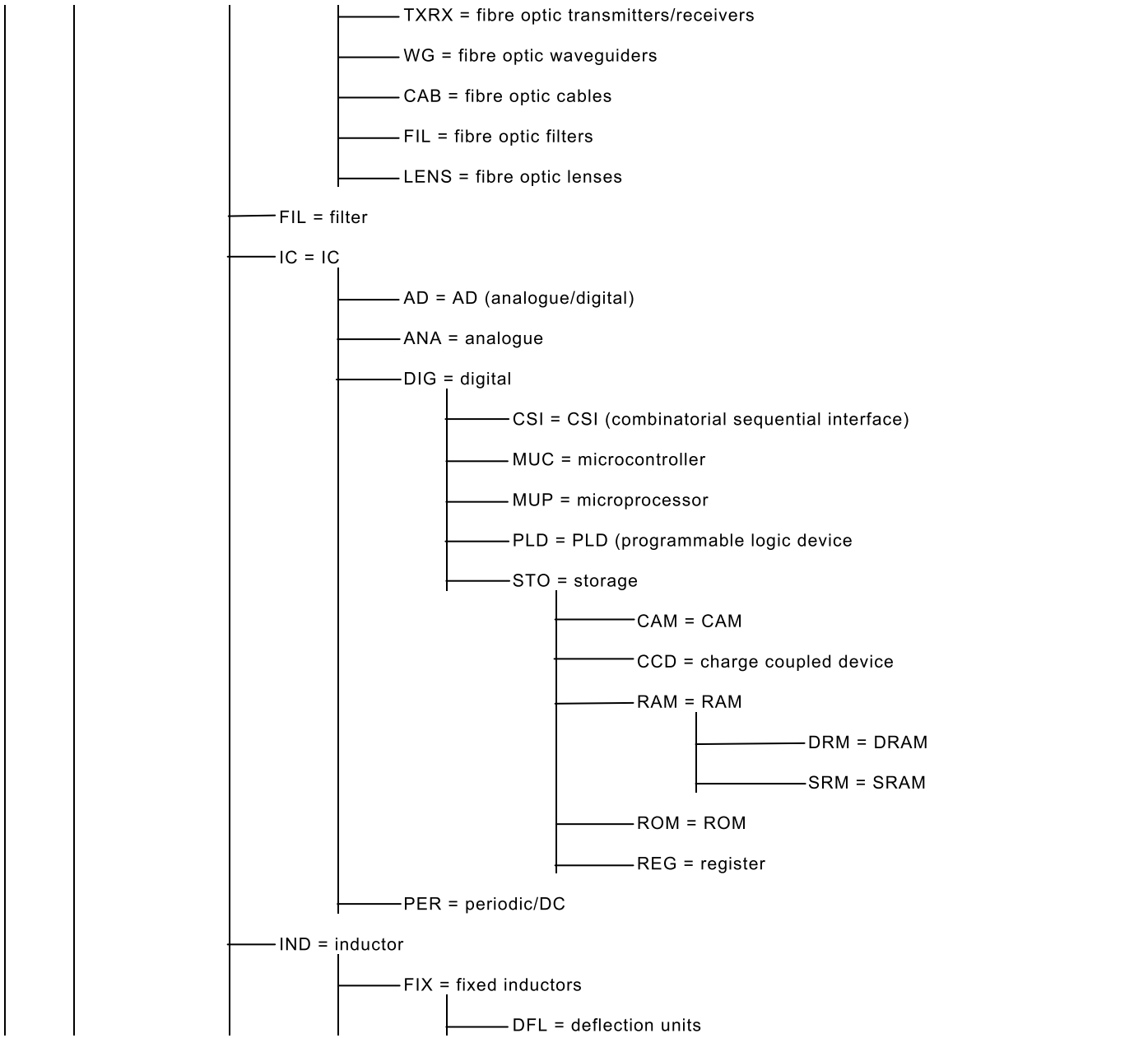
Annex A
(normative)

Classification scheme



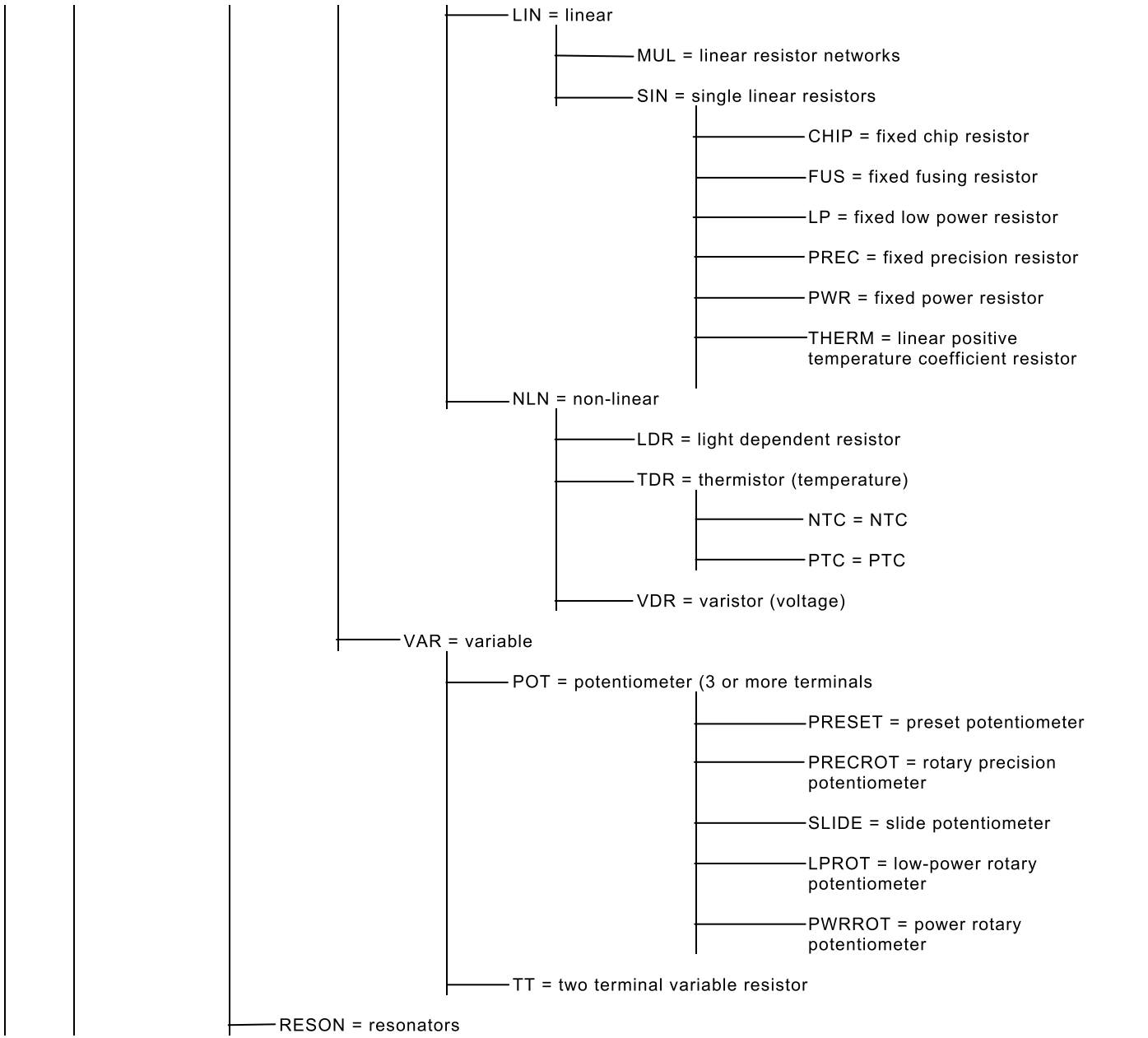
	Class. DET	Class	Drawing
AIR = air capacitor	AAE004-007	AAA022-001	
CER = ceramic capacitor	AAE004-007	AAA023-001	
CL1 = class1 ceramic capacitor	AAE038-005	AAA024-001	
CL2 = class 2 ceramic capacitor	AAE038-004	AAA025-001	
ELC = electrolytic capacitor	AAE004-007	AAA026-002	
STAN = solid tantalum electrolytics	AAJ001-001	AAA501-001	
NTAN = non-solid tatalum electrolytics	AAJ001-001	AAA502-001	
SAL = solid aluminium electrolytics	AAJ001-001	AAA503-001	
NAL = non-solid aluminium electrolytics	AAJ001-001	AAA504-001	
FLM = film capacitor	AAE004-007	AAA027-001	
GLS = glass capacitor	AAE004-007	AAA028-001	
MIC = mica capacitor	AAE004-007	AAA029-002	
MLAY = multilayer capacitor	AAE004-007	AAA505-001	
PAP = paper capacitor	AAE004-007	AAA030-001	
VAR = variable	AAE003-006	AAA031-002	
CND = conductor	AAE002-006	AAA032-001	
BAR = bare conductor	AAF239-005	AAA033-001	
INS = insulated conductor	AAF239-005	AAA034-001	
CBL = cable (multi-conducted)	AAF249-005	AAA035-005	
POW = power	AAE152-005	AAA036-001	
SIG = signal	AAE152-005	AAA037-001	
LF = low frequency	AAF146-005	AAA038-001	
RF = radio frequency	AAF146-005	AAA39-001	
IWR = insulated wire (single conductor)	AAF249-005	AAA040-001	
DEL = delay line	AAE002-006	AAA041-001	
DID = diode device	AAE002-006	AAA042-001	

	Class. DET	Class	Drawing
BRI = bridge rectifier	AAF305-005	AAA043-001	
DIO = diode	AAF305-005	AAA044-001	
BOD = breakover diode	AAE273-007	AAA045-001	
REC = rectifier diode	AAE273-007	AAA046-001	
SIG = signal diode	AAE273-007	AAA047-002	
STB = stabilizer diode	AAE273-007	AAA048-001	
CUR = current regulator diode	AAE312-005	AAA049-001	
REF = voltage reference diode	AAE312-005	AAA050-001	
REG = voltage regulator diode	AAE312-005	AAA051-001	
STA = stabistor	AAE312-005	AAA052-001	
SUP = transient suppressor diode	AAE312-005	AAA053-001	
VAR = variable diode	AAE273-007	AAA054-002	
VMP = voltage multiplier	AAF305-005	AAA055-001	
FIBOPTIC = fibre optics	AAE002-006	AAA578-001	
LINKS = fibre optic links	AAJ048-001	AAA579-001	
CONN = fibre optic connectors)	AAJ048-001	AAA580-001	
SWI = fibre optic switches	AAJ048-001	AAA581-001	
BRA = fibre optic branches	AAJ048-001	AAA582-001	
COUP = fibre optic couplers/splicers	AAJ048-001	AAA583-001	
ATT = fibre optic attenuators	AAJ048-001	AAA584-001	
DET = fibre optic detectors	AAJ048-001	AAA585-001	
ISOL = fibre optic isolators	AAJ048-001	AAA586-001	
NETW = fibre optic networks	AAJ048-001	AAA587-001	
SOURC = fibre optic light sources	AAJ048-001	AAA588-001	
MOD = fibre optic modulators	AAJ048-001	AAA589-001	



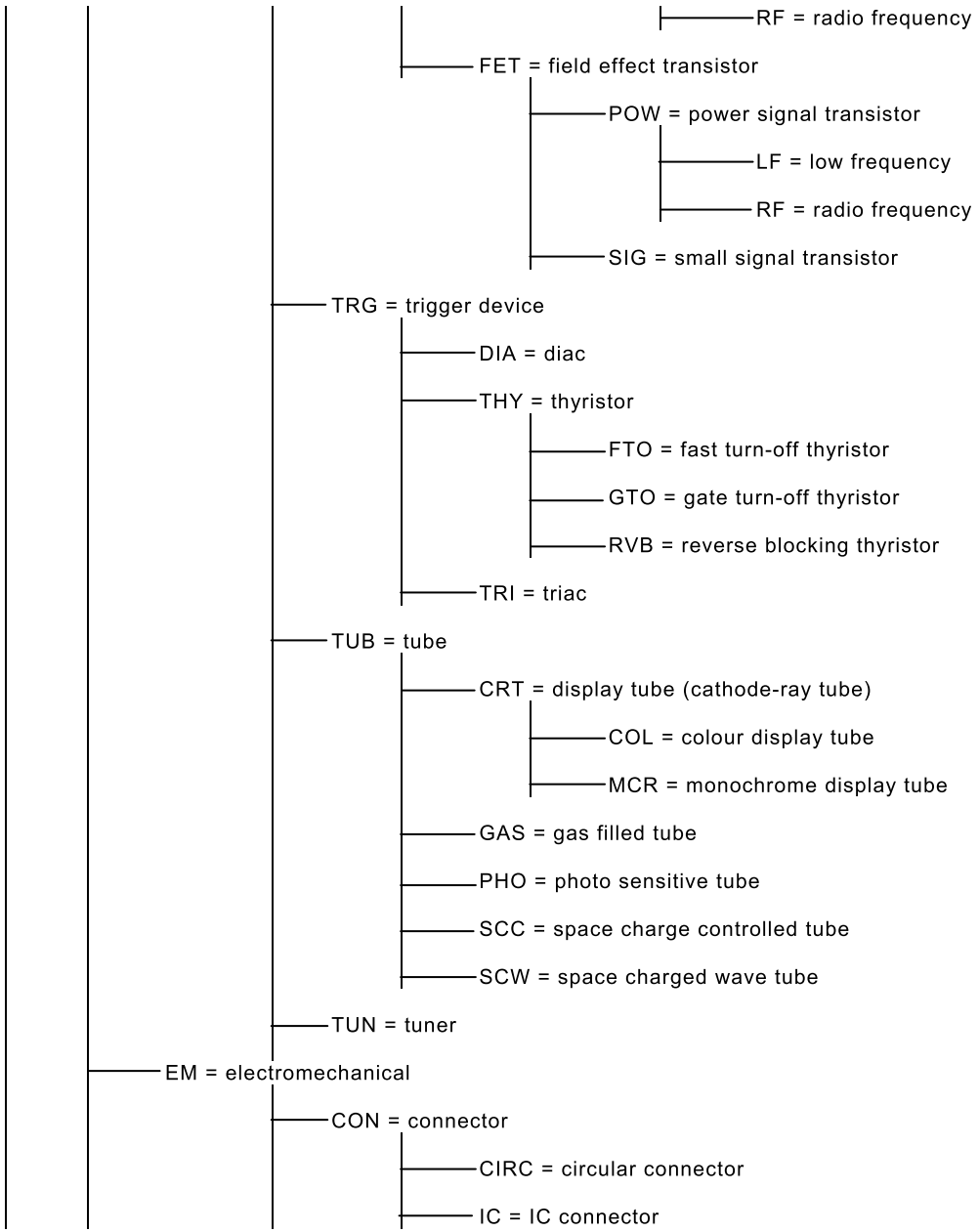
Class. DET	Class	Drawing
AAJ048-001	AAA590-001	
AAJ048-001	AAA591-001	
AAJ048-001	AAA592-001	
AAJ048-001	AAA593-001	
AAJ048-001	AAA594-001	
AAE002-006	AAA056-002	
AAE002-006	AAA057-001	
AAE077-005	AAA072-001	
AAE077-005	AAA058-001	
AAE077-005	AAA059-001	
AAE085-005	AAA060-001	
AAE085-005	AAA061-001	
AAE085-005	AAA062-001	
AAE085-005	AAA063-001	
AAE085-005	AAA064-002	
AAE722-007	AAA065-001	
AAE722-007	AAA066-001	
AAE722-007	AAA067-001	
AAF233-005	AAA068-001	
AAF233-005	AAA069-001	
AAE722-007	AAA070-001	
AAE722-007	AAA071-002	
AAE077-005	AAA073-001	
AAE002-006	AAA074-002	
AAE003-006	AAA601-001	
AAF390-002	AAA225-001	

	Class. DET	Class	Drawing
CHOKE = choke	AAF390-002	AAA226-001	
COIL = coil	AAF390-002	AAA227-001	
LINUNIT = linearity control unit	AAF390-002	AAA228-001	
ANT = antenna inductors	AAF390-002	AAA603-001	
SOL = solenoids	AAF390-002	AAA604-001	
VAR = variable inductors	AAE003-006	AAA602-001	
LAM = lamp	AAE002-006	AAA075-001	
LCD = liquid crystal display	AAE002-006	AAA076-001	
MIC = microwave component	AAE002-006	AAA229-001	
OPT = optoelectronic device	AAE002-006	AAA077-002	
IMAGE = image pickup devices	AAE545-006	AAA597-001	
PHC = photocoupler	AAE545-006	AAA078-001	
PHE = photoemitter	AAE545-006	AAA079-001	
IRD = infrared emitting diode	AAE555-005	AAA081-001	
LAS = laser	AAE555-005	AAA082-001	
LED = LED	AAE555-005	AAA080-001	
PHS = photosensor	AAE545-006	AAA083-001	
IR = infrared sensor	AAE566-005	AAA084-001	
U = ultraviolet radiation	AAE566-005	AAA085-001	
VIS = visible radiation	AAE566-005	AAA086-001	
OSC = oscillator	AAE002-006	AAA087-001	
PE = piezoelectric device	AAE002-006	AAA088-001	
PWC= printed wiring circuit	AAE002-006	AAA232-001	
RES = resistor	AAE002-006	AAA089-002	
FIX = fixed	AAE003-006	AAA090-002	



	Class. DET	Class	Drawing
LIN = linear	AAE114-007	AAA091-002	
MUL = linear resistor networks	AAF101-006	AAA093-002	
SIN = single linear resistors	AAF101-006	AAA092-002	
CHIP = fixed chip resistor	AAJ003-001	AAA512-001	
FUS = fixed fusing resistor	AAJ003-001	AAA514-001	
LP = fixed low power resistor	AAJ003-001	AAA511-001	
PREC = fixed precision resistor	AAJ003-001	AAA509-001	
PWR = fixed power resistor	AAJ003-001	AAA510-001	
THERM = linear positive temperature coefficient resistor	AAJ003-001	AAA513-001	
NLN = non-linear	AAE114-007	AAA094-001	
LDR = light dependent resistor	AAE122-005	AAA095-001	
TDR = thermistor (temperature)	AAE122-005	AAA096-002	
NTC = NTC	AAE126-005	AAA097-001	
PTC = PTC	AAE126-005	AAA098-002	
VDR = varistor (voltage)	AAE122-005	AAA099-001	
VAR = variable	AAE003-006	AAA100-003	
POT = potentiometer (3 or more terminals	AAE139-005	AAA102-002	
PRESET = preset potentiometer	AAJ006-002	AAA516-002	
PRECROT = rotary precision potentiometer	AAJ006-002	AAA607-001	
SLIDE = slide potentiometer	AAJ006-002	AAA517-001	
LPROT = low-power rotary potentiometer	AAJ006-002	AAA609-001	
PWRROT = power rotary potentiometer	AAJ006-002	AAA608-001	
TT = two terminal variable resistor	AAE139-005	AAA101-001	
RESON = resonators	AAE002-006	AAA596-001	

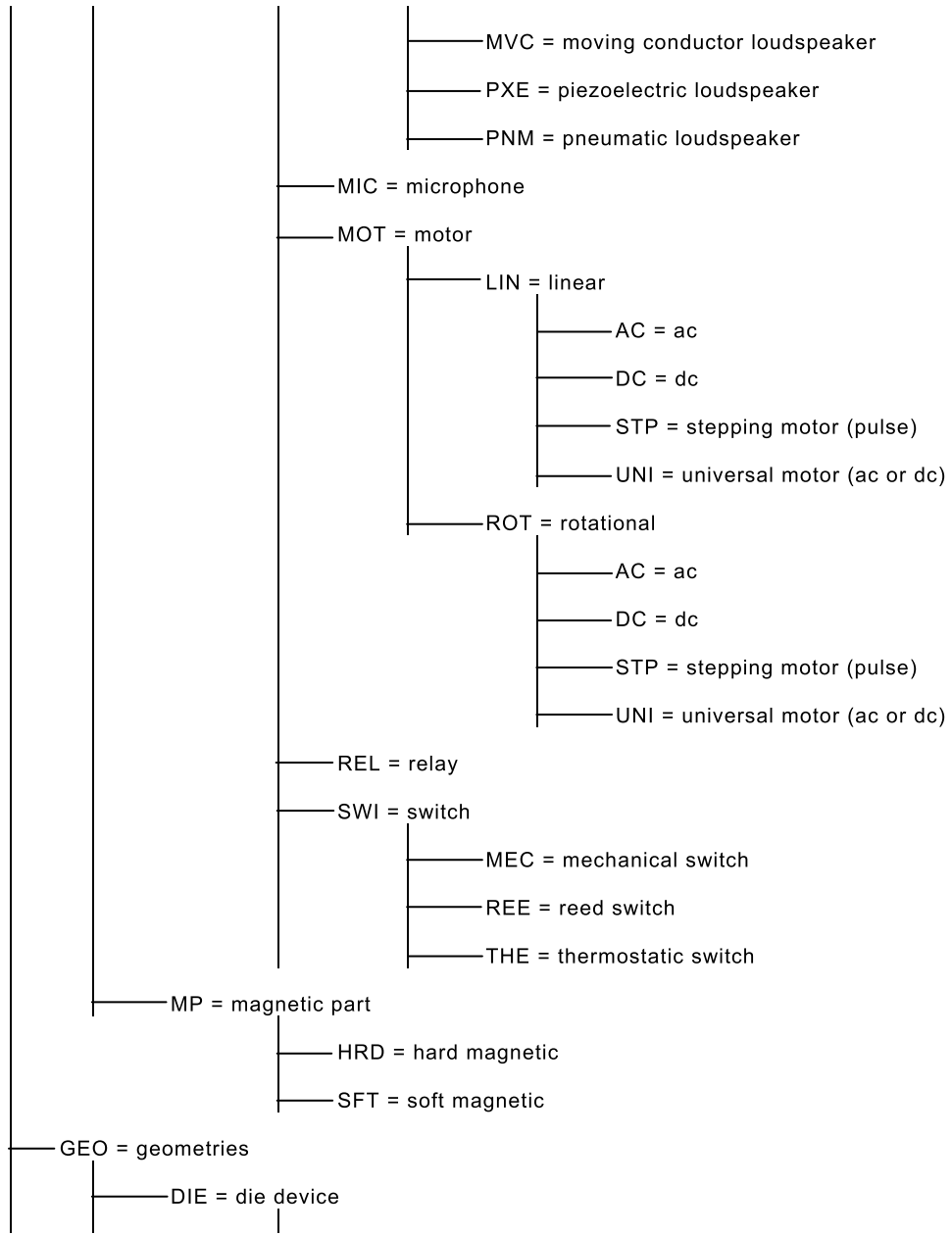
	Class. DET	Class	Drawing
SEN = sensor	AAE002-006	AAA103-001	
HUM = relative humidity	AAE892-005	AAA104-001	
LGT = light	AAE892-005	AAA105-001	
MGN = magnetic field strength	AAE892-005	AAA106-001	
NCL = nuclear	AAE892-005	AAA107-001	
PRS = pressure	AAE892-005	AAA108-001	
PRX = proximity	AAE892-005	AAA109-001	
TMP = temperature	AAE892-005	AAA110-001	
SPARK = spark gaps	AAE002-006	AAA595-001	
AIR = air spark gaps	AAJ081-001	AAA605-001	
GAS = gas-filled spark gaps	AAJ081-001	AAA606-001	
TFM = transformer	AAE002-006	AAA111-001	
POW = power	AAE152-001	AAA112-001	
FIX = fixed	AAE003-006	AAA113-001	
VAR = variable	AAA114-001	AAA114-001	
SIG = signal	AAE152-001	AAA115-002	
FIX = fixed	AAE003-006	AAA116-001	
VAR = variable	AAE003-006	AAA117-001	
TRA = transistor	AAE002-006	AAA118-001	
BIP = bipolar transistor	AAE401-001	AAA119-002	
POW = power signal transistor	AAE971-007	AAA120-002	
LF = low frequency	AAF146-005	AAA121-001	
RF = radio frequency	AAF146-005	AAA122-001	
SIG = small signal transistor	AAE971-007	AAA123-002	
LF = low frequency	AAF146-005	AAA124-001	



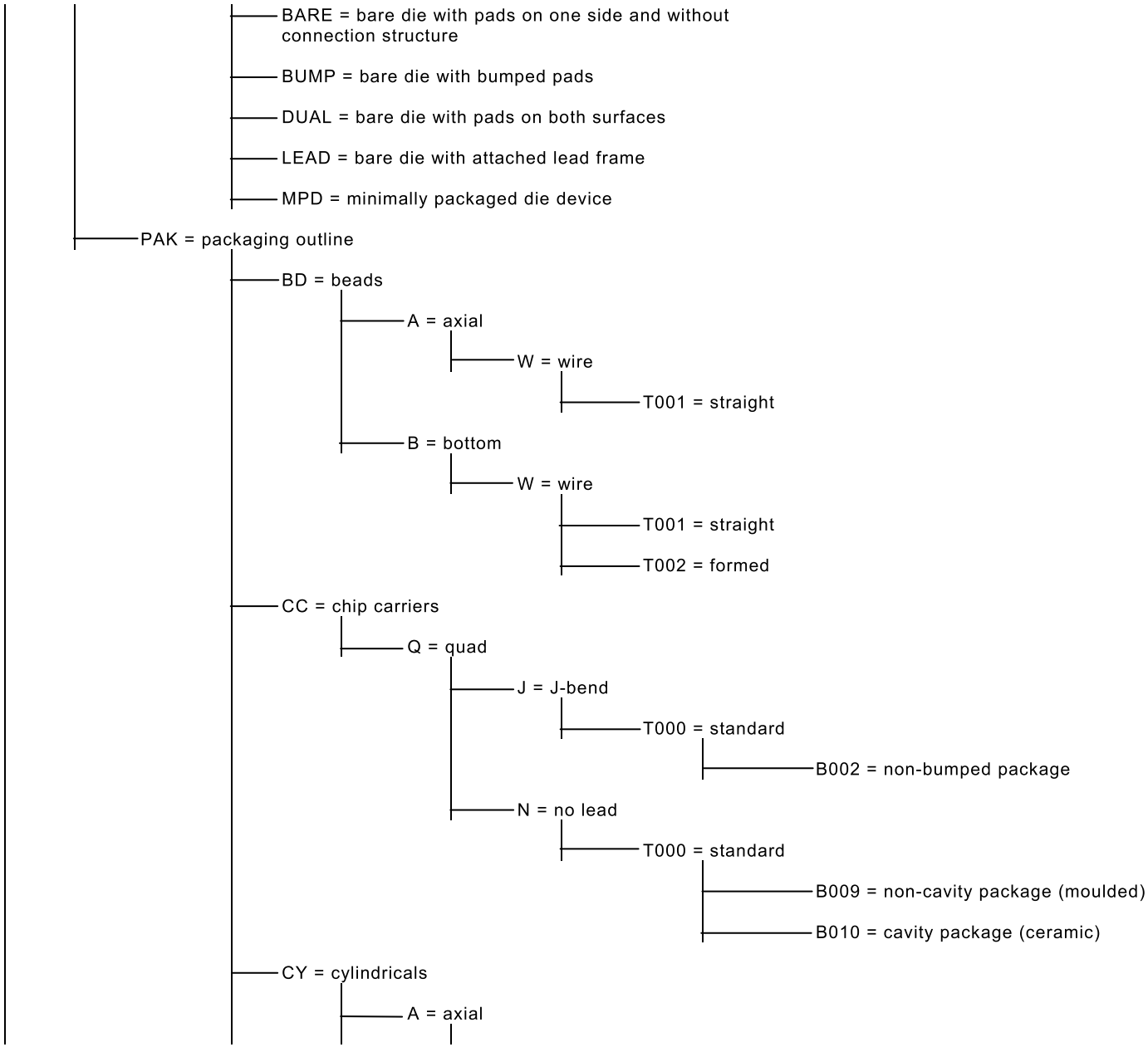
	Class. DET	Class	Drawing
RF = radio frequency	AAF146-005	AAA125-001	
FET = field effect transistor	AAE401-001	AAA126-002	
POW = power signal transistor	AAE971-007	AAA127-002	
LF = low frequency	AAF146-005	AAA128-001	
RF = radio frequency	AAF146-005	AAA129-001	
SIG = small signal transistor	AAE971-007	AAA130-002	
TRG = trigger device	AAE002-006	AAA131-001	
DIA = diac	AAE724-005	AAA132-001	
THY = thyristor	AAE724-005	AAA133-001	
FTO = fast turn-off thyristor	AAE743-005	AAA134-001	
GTO = gate turn-off thyristor	AAE743-005	AAA135-001	
RVB = reverse blocking thyristor	AAE743-005	AAA136-001	
TRI = triac	AAE724-005	AAA137-001	
TUB = tube	AAE002-006	AAA138-001	
CRT = display tube (cathode-ray tube)	AAE696-005	AAA139-001	
COL = colour display tube	AAF202-005	AAA140-001	
MCR = monochrome display tube	AAF202-005	AAA141-002	
GAS = gas filled tube	AAE696-005	AAA142-001	
PHO = photo sensitive tube	AAE696-005	AAA142-001	
SCC = space charge controlled tube	AAE696-005	AAA142-001	
SCW = space charged wave tube	AAE696-005	AAA142-001	
TUN = tuner	AAE002-006	AAA146-001	
EM = electromechanical	AAE001-005	AAA147-003	
CON = connector	AAE060-006	AAA148-002	
CIRC = circular connector	AAE349-006	AAA518-001	
IC = IC connector	AAE349-006	AAA522-001	

	Class. DET	Class	Drawing
JACK = plug and jack	AAE349-006	AAA526-001	
ASSY = plug assemblies	AAE349-006	AAA549-001	
CMPLX = complex jack boards	AAJ024-001	AAA550-001	
CONC = concentric plug and jack	AAJ024-001	AAA536-001	
JACK = concentric jack	AAJ025-001	AAA538-001	
MULT = multiple concentric plug	AAJ025-001	AAA539-001	
PLUG = concentric plug	AAJ025-001	AAA537-001	
PIN = pin plug and jack	AAJ024-001	AAA540-001	
JACK = pin jack	AAJ026-001	AAA542-001	
MULT = pin multiple jack	AAJ026-001	AAA543-001	
PIN = pin plug	AAJ026-001	AAA541-001	
SHLD = shielded pin jack	AAJ026-001	AAA544-001	
PWR = plug and jack for d.c. power	AAJ024-001	AAA545-001	
CAR = car plug	AAJ027-001	AAA548-001	
JACK = dc power jack	AAJ027-001	AAA547-001	
PLUG dc power plug	AAJ027-001	AAA546-001	
MOD = modular connector	AAE349-006	AAA523-001	
PCB = printed circuit board	AAE349-006	AAA520-001	
RECT = rectangular connector	AAE349-006	AAA519-001	
RF = RF connector	AAE349-006	AAA521-001	
SOCK = sockets	AAE349-006	AAA527-001	
ANT = socket for antenna feeder	AAJ028-001	AAA565-001	
FUSE = fuse holder and socket	AAJ028-001	AAA564-001	
IC = socket for integrated circuits	AAJ028-001	AAA555-001	
LIGHT = lighting socket	AAJ028-001	AAA563-001	

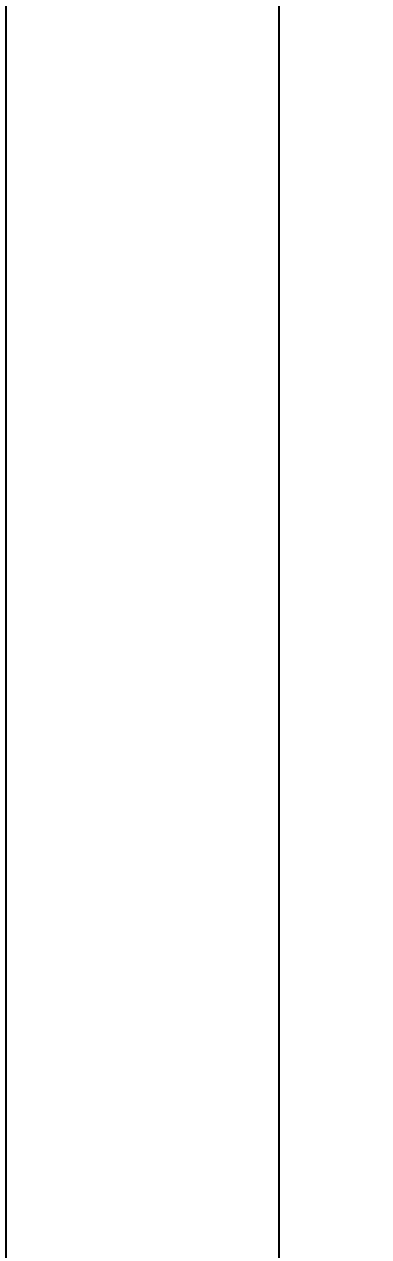
	Class. DET	Class	Drawing
PCB = socket for PCB	AAJ028-001	AAA556-001	
PWR = power socket	AAJ028-001	AAA557-001	
SIG = signal socket	AAJ028-001	AAA561-001	
TRA = transistor socket	AAJ028-001	AAA554-001	
TUBE = socket for tube	AAJ028-001	AAA551-001	
XTAL = socket for quartz cristal	AAJ028-001	AAA562-001	
TERM = terminals	AAE349-006	AAA528-001	
ARRY = terminal array	AAJ031-001	AAA569-001	
BRD = terminal board	AAJ031-001	AAA572-001	
ROD = terminal rod	AAJ031-001	AAA573-001	
SM = small terminals	AAJ031-001	AAA566-001	
CONPART = connector part	AAE060-006	AAA610-001	
CONTACT = connector contact	AAF464-001	AAA524001	
ACCY = connector accessoires	AAF464-001	AAA525-001	
TOOL = connector tool	AAF464-001	AAA611-001	
SHELL = connector shell	AAF464-001	AAA612-001	
INSERT = connector insert	AAF464-001	AAA613-001	
FUS = fuse	AAE060-006	AAA149-002	
CUR current activated fuse	AAJ012-002	AAA575-001	
TERM = thermally activated fuse	AAJ012-002	AAJ576-001	
LSP = loudspeaker	AAE060-006	AAA150-001	
ELM = electromagnetic loudspeaker	AAE005-006	AAA154-001	
ELS = electrostatic loudspeaker	AAE005-006	AAA157-001	
ION = ionic loudspeaker	AAE005-006	AAA153-001	
MGD = magnetodynamic loudspeaker	AAE005-006	AAA152-001	
MGS = magnetostrictive loudspeaker	AAE005-006	AAA158-001	



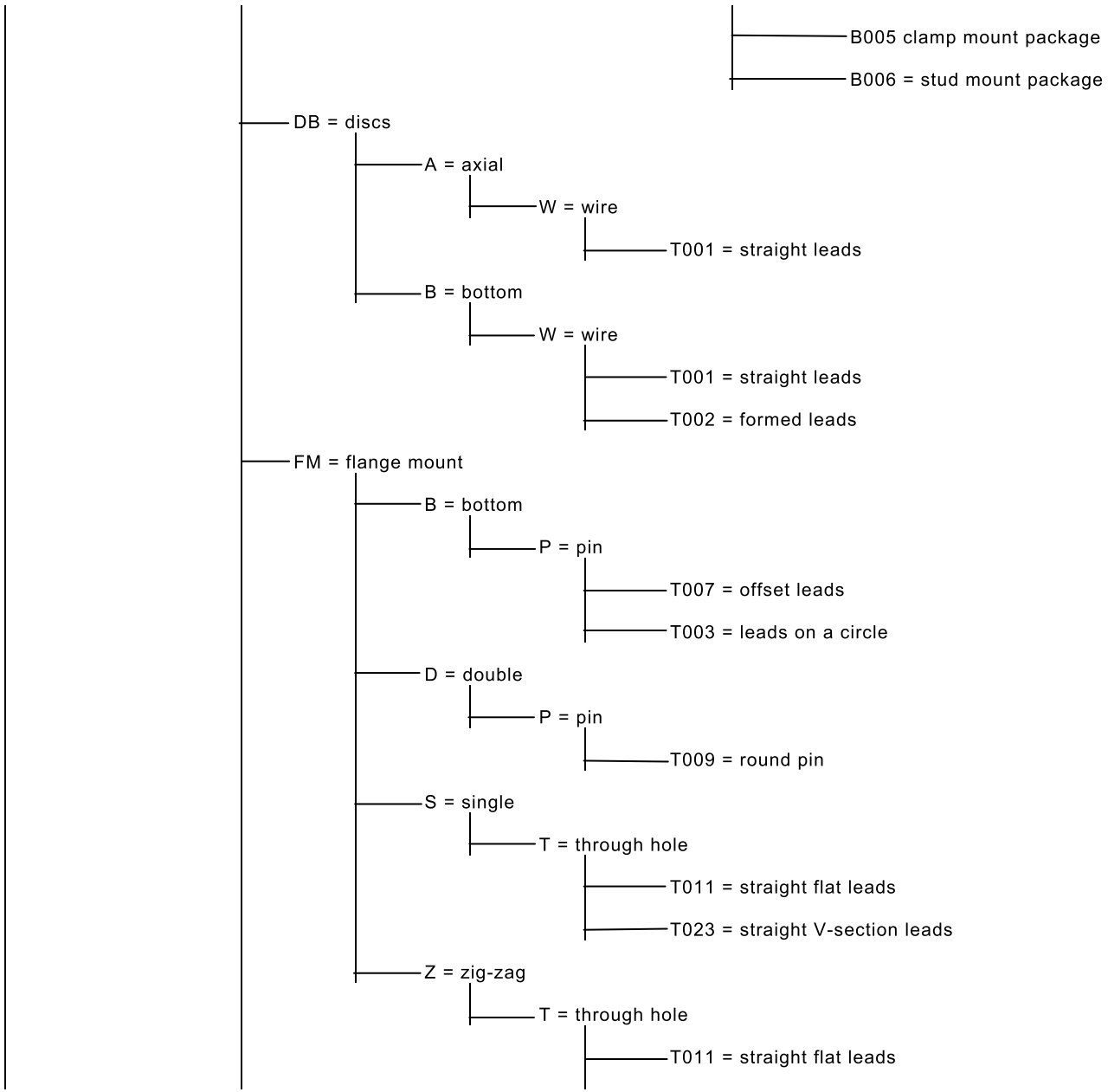
Class. DET	Class	Drawing
AAE005-006	AAA151-001	
AAE005-006	AAA156-001	
AAE005-006	AAA155-001	
AAE060-006	AAA159-001	
AAE060-006	AAA160-005	
AAE179-005	AAA161-001	
AAE178-005	AAA162-001	
AAE178-005	AAA163-001	
AAE178-005	AAA164-001	
AAE178-005	AAA165-001	
AAE179-001	AAA166-001	
AAE178-005	AAA167-001	
AAE178-005	AAA168-001	
AAE178-005	AAA169-001	
AAE178-005	AAA170-001	
AAE060-006	AAA171-001	
AAE60-005	AAA172-001	
AAE926-005	AAA174-002	
AAE926-005	AAA173-001	
AAE926-005	AAA175-001	
AAE001-005	AAA215-001	
AAE759-005	AAA216-001	
AAE759-005	AAA217-001	
AAE000-001	AAA301-001	
AAG000-001	AAA302-001	



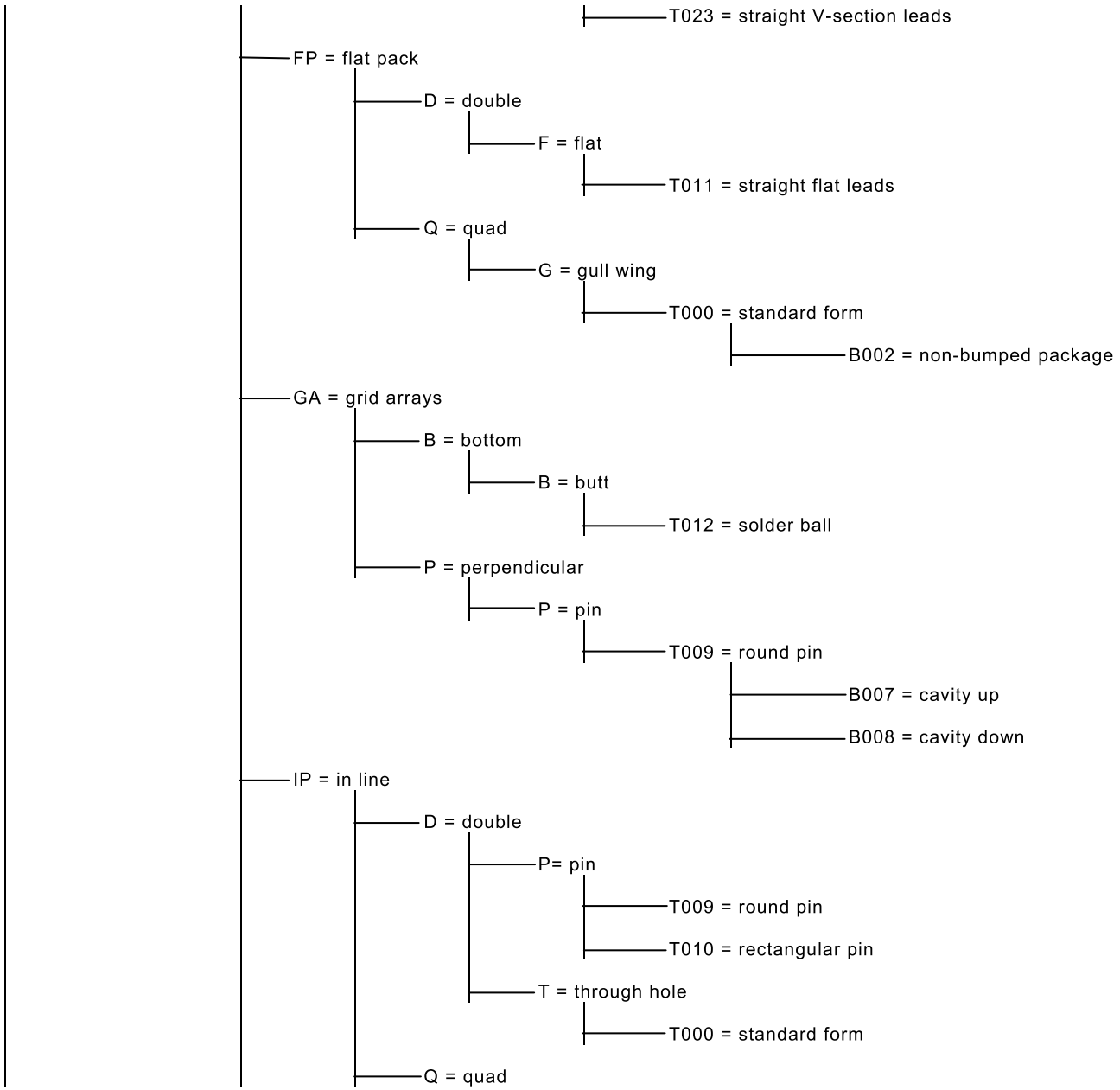
	Class. DET	Class	Drawing
BARE = bare die with pads on one side and without connection structure	AAD004-001	AAA295-001	
BUMP = bare die with bumped pads	AAD004-001	AAA296-001	
DUAL = bare die with pads on both surfaces	AAD004-001	AAA299-001	
LEAD = bare die with attached lead frame	AAD004-001	AAA297-001	
MPD = minimally packaged die device	AAD004-001	AAA298-001	
PAK = packaging outline	AAG000-001	AAA303-001	
BD = beads	AAG057-001	AAA304-001	
A = axial	AAG056-001	AAA322-001	
W = wire	AAG058-001	AAA353-001	
T001 = straight	AAG054-001	AAA391-001	DAA001-001
B = bottom	AAG056-001	AAA323-001	
W = wire	AAG058-001	AAA354-001	
T001 = straight	AA9054-001	AAA392-001	DAA002-001
T002 = formed	AAG054-001	AAA393-001	DAA003-001
CC = chip carriers	AAG057-001	AAA305-001	
Q = quad	AAG056-001	AAA324-001	
J = J-bend	AAG058-001	AAA355-001	
T000 = standard	AAG054-001	AAA394-001	
B002 = non-bumped package	AAG055-001	AAA445-001	DAA040-001
N = no lead	AAG058-001	AAA356-001	
T000 = standard	AAG054-001	AAA395-001	
B009 = non-cavity package (moulded)	AAG055-001	AAA446-001	DAA041-001
B010 = cavity package (ceramic)	AAG055-001	AAA447-001	DAA042-001
CY = cylindricals	AAG057-001	AAA307-001	
A = axial	AAG056-001	AAA325-001	



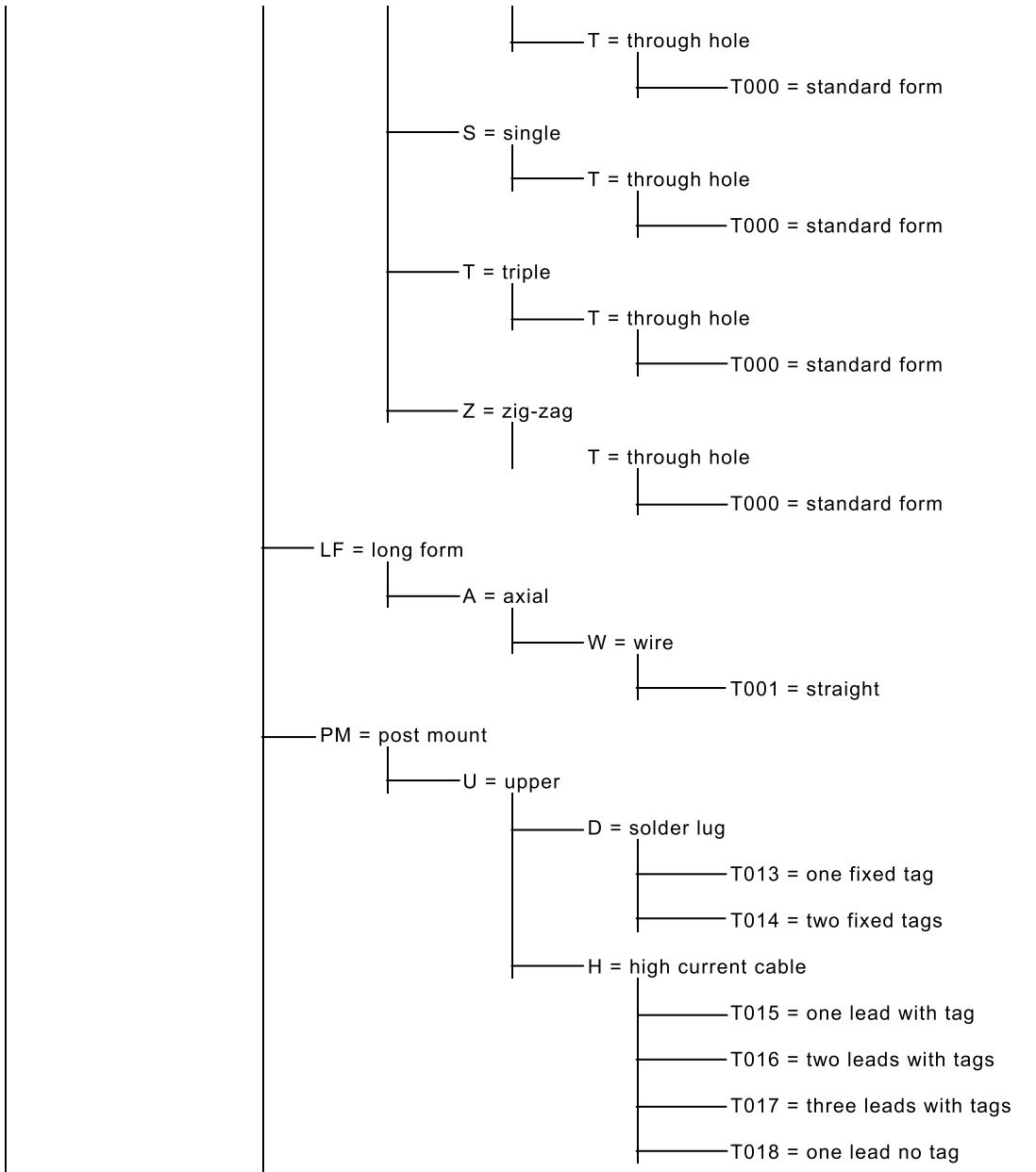
	Class. DET	Class	Drawing
W = wire	AAG058-001	AAA357-001	
T001 = straight	AAG054-001	AAA396-001	
B003 = plain cylindricals	AAG055-001	AAA448-001	DAA043-001
B004 = top hat package	AAG055-001	AAA449-001	DAA044-001
B = bottom	AAG056-001	AAA326-001	
W = wire	AAG058-001	AAA358-001	
T003 = leads on a circle	AAG054-001	AAA397-001	DAA004-001
T004 = straight leads in line	AAG054-001	AAA398-001	DAA005-001
T005 = formed leads in line	AAG054-001	AAA399-001	DAA006-001
T006 = leads on a square grid	AAG054-001	AAA400-001	DAA007-001
T007 = offset leads	AAG054-001	AAA401-001	DAA008-001
E = end	AAG056-001	AAA327-001	
R = wrap around	AAG058-001	AAA359-001	
T000 = standard form	AAG054-001	AAA402-001	DAA009-001
R = radial	AAG056-001	AAA328-001	
D = solder lug	AAG058-001	AAA360-001	
T001 = straight leads	AAG054-001	AAA402-001	DAA010-001
W = wire	AAG058-001	AAA361-001	
T001 = straight leads	AAG054-001	AAA404-001	DAA011-001
U = upper	AAG056-001	AAA329-001	
D = solder lug	AAG058-001	AAA362-001	
T000 = standard form	AAG054-001	AAA405-001	
B005 = clamp mount package	AAG055-001	AAA450-001	DAA045-001
B006 = stud mount package	AAG055-001	AAA451-002	DAA046-002
Y = screw	AAG058-001	AAA363-001	
T000 = standard form	AAG054-001	AAA406-001	



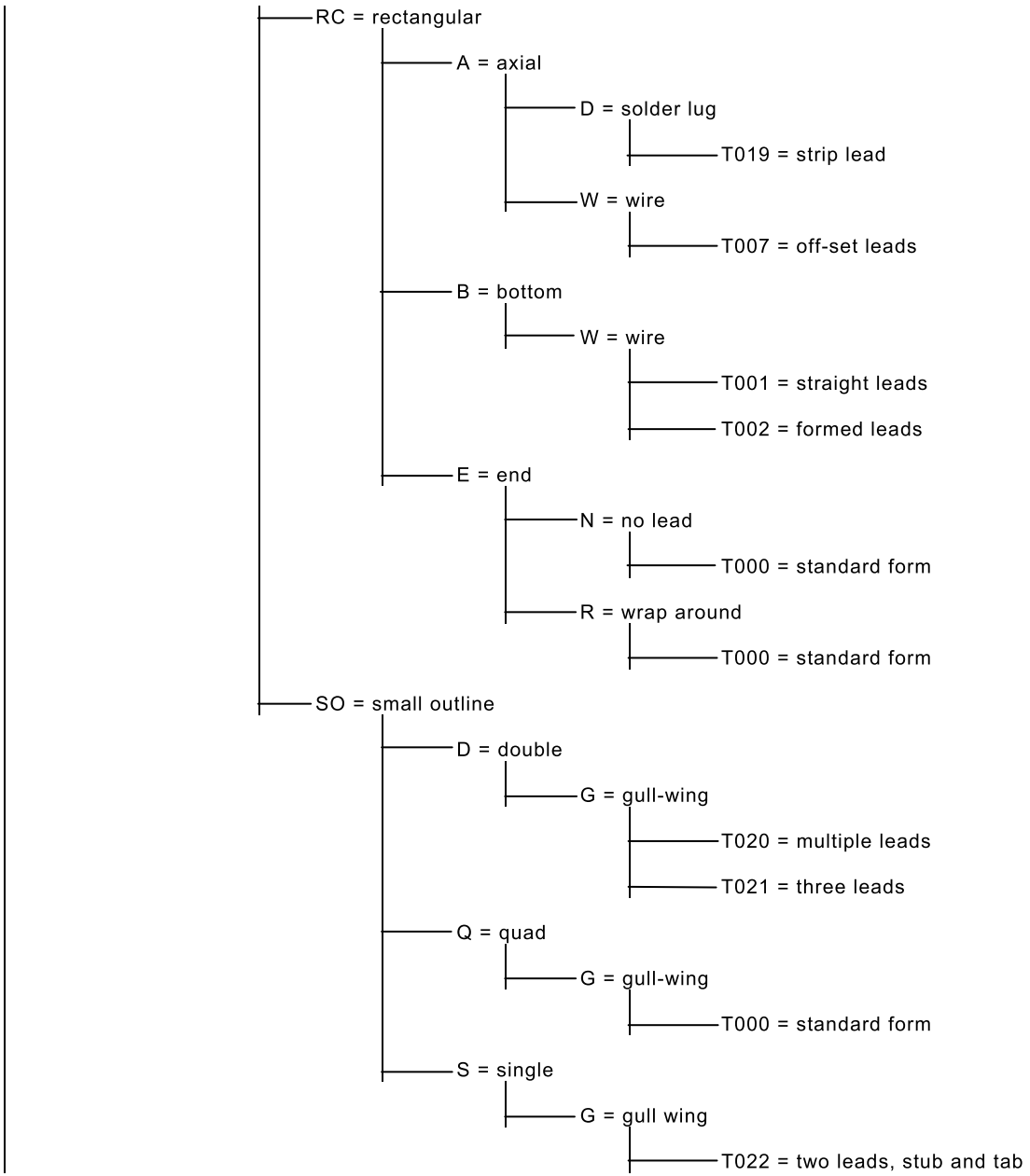
Class. DET	Class	Drawing
AAG055-001	AAA452-001	DAA047-001
AAG055-001	AAA453-002	DAA048-002
AAG057-001	AAA308-001	
AAG056-001	AAA330-001	
AAG058-001	AAA364-001	
AAG054-001	AAA407-001	DAA012-001
AAG056-001	AAA331-001	
AAG058-001	AAA365-001	
AAG054-001	AAA408-001	DAA013-001
AAG054-001	AAA409-001	DAA014-001
AAG057-001	AAA309-001	
AAG056-001	AAA332-001	
AAG058-001	AAA366-001	
AAG054-001	AAA410-001	DAA015-001
AAG054-001	AAA411-001	DAA016-001
AAG056-001	AAA333-001	
AAG058-001	AAA367-001	
AAG054-001	AAA412-001	DAA017-001
AAG056-001	AAA334-001	
AAG058-001	AAA368-001	
AAG054-001	AAA413-001	DAA018-001
AAG054-001	AAA414-001	DAA019-001
AAG056-001	AAA335-001	
AAG058-001	AAA369-001	
AAG054-001	AAA415-001	



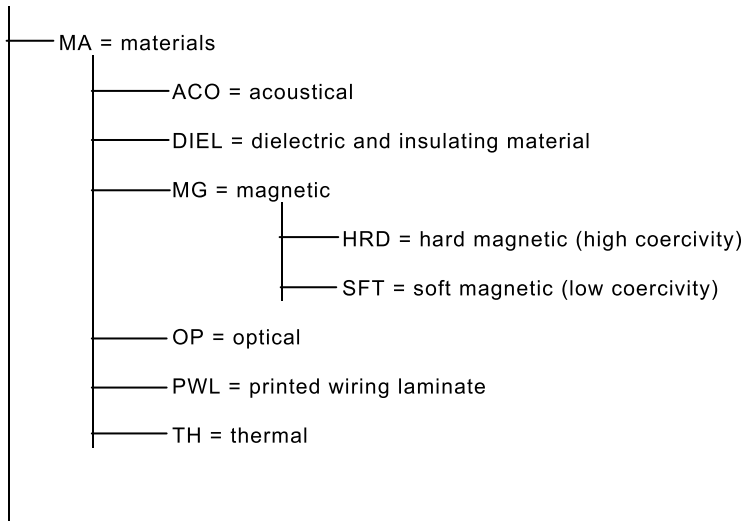
Class. DET	Class	Drawing
AAG054-001	AAA416-001	
AAG057-001	AAA311-001	
AAG056-001	AAA336-001	
AAG058-001	AAA370-001	
AAG054-001	AAA417-001	DAA020-001
AAG056-001	AAA337-001	
AAG058-001	AAA371-001	
AAG054-001	AAA418-001	
AAG055-001	AAA454-001	DAA049-001
AAG057-001	AAA312-001	
AAG056-001	AAA338-001	
AAG058-001	AAA372-001	
AAG054-001	AAA419-001	DAA021-001
AAG056-001	AAA339-001	
AAG058-001	AAA373-001	
AAG054-001	AAA420-001	
AAG055-001	AAA455-001	DAA050-001
AAG055-001	AAA456-001	DAA051-001
AAG057-001	AAA313-001	
AAG056-001	AAA340-001	
AAG058-001	AAA374-001	
AAG054-001	AAA421-001	DAA022-001
AAG054-001	AAA422-001	DAA023-001
AAG058-001	AAA375-001	
AAG054-001	AAA423-001	DAA024-001
AAG056-001	AAA341-001	



Class. DET	Class	Drawing
AAG058-001	AAA376-001	
AAG054-001	AAA424-001	
AAG056-001	AAA342-001	
AAG058-001	AAA377-001	
AAG054-001	AAA425-001	
AAG056-001	AAA343-001	
AAG058-001	AAA378-001	
AAG054-001	AAA426-001	
AAG056-001	AAA344-001	
AAG058-001	AAA379-001	
AAG054-001	AAA427-001	
AAG057-001	AAA314-001	
AAG056-001	AAA345-001	
AAG058-001	AAA380-001	
AAG054-001	AAA428-001	
AAG057-001	AAA318-001	
AAG056-001	AAA346-001	
AAG058-001	AAA381-001	
AAG054-001	AAA429-002	DAA025-002
AAG054-001	AAA430-002	DAA026-002
AAG058-001	AAA382-001	
AAG054-001	AAA431-002	DAA027-002
AAG054-001	AAA432-002	DAA028-002
AAG054-001	AAA433-002	DAA029-002
AAG054-001	AAA434-002	DAA030-002



	Class. DET	Class	Drawing
RC = rectangular	AAG057-001	AAA319-001	
A = axial	AAG056-001	AAA347-001	
D = solder lug	AAG058-001	AAA383-001	
T019 = strip lead	AAG054-001	AAA435-001	DAA031-001
W = wire	AAG058-001	AAA384-001	
T007 = off-set leads	AAG054-001	AAA436-001	DAA032-001
B = bottom	AAG056-001	AAA348-001	
W = wire	AAG058-001	AAA385-001	
T001 = straight leads	AAG054-001	AAA437-001	DAA033-001
T002 = formed leads	AAG054-001	AAA438-001	DAA034-001
E = end	AAG056-001	AAA349-001	
N = no lead	AAG058-001	AAA386-001	
T000 = standard form	AAG054-001	AAA439-001	DAA035-001
R = wrap around	AAG058-001	AAA387-001	
T000 = standard form	AAG054-001	AAA440-001	DAA036-001
SO = small outline	AAG057-001	AAA320-001	
D = double	AAG056-001	AAA350-001	
G = gull-wing	AAG058-001	AAA388-001	
T020 = multiple leads	AAG054-001	AAA441-001	DAA037-001
T021 = three leads	AAG054-001	AAA442-001	DAA038-001
Q = quad	AAG056-001	AAA351-001	
G = gull-wing	AAG058-001	AAA389-001	
T000 = standard form	AAG054-001	AAA443-001	
S = single	AAG056-001	AAA352-001	
G = gull wing	AAG058-001	AAA390-001	
T022 = two leads, stub and tab	AAG054-001	AAA444-001	DAA039-001



Class. DET	Class	Drawing
AAE000-001	AAA218-001	
AAF311-007	AAA219-001	
AAF311-007	AAA231-001	
AAF311-007	AAA220-001	
AAE759-005	AAA221-001	
AAE759-005	AAA222-001	
AAF311-006	AAA223-001	
AAF311-007	AAA230-001	
AAF311-007	AAA224-001	

Annex B
(normative)
Class definitions

AAA000-001 01

IEC reference collection IECREF

Root class providng a name scope for the characteristic properties in the IEC reference collection of standard data element types.

NOTE
IEC REFERENCE COLLECTION is a data dictionary containing a classification with associated sets of properties for the description of electric/electronic and electromechanical components and materials.

AAE000-001 IEC reference class

AAA001-001 02

Components CO

A set of industrial products of which each product can be described with the same group of data element types.

NOTE
COMPONENTS are industrial products which serve a specific function or functions, which are not decomposable or physically divisible and which are intended for use in a higher-order assembled product.

Properties
AAE006-006 mounting features
AAE012-005 international standard
AAE017-005 reference temperature
AAE019-005 body length
AAE020-005 body height
AAE021-005 body breadth
AAE022-005 outside diameter
AAE111-005 packing type
AAE112-005 taping
AAE687-005 quality approval authority
AAE752-005 mass
AAE753-005 inside diameter
AAE834-005 component description
AAE965-005 component status
AAF043-005 national standard
AAF265-005 packing arrangement
AAF267-005 inner tape spacing
AAF268-005 orientation
AAF269-005 marking method
AAF276-002 stress temperature min
AAF277-002 stress temperature max
AAF278-002 stress ambient temperature
AAF279-002 stress relative humidity
AAF318-001 flange breadth
AAF356-001 reference view
AAF357-001 terminal identifier
AAF358-001 swapability indicator
AAF359-001 permutability indicator
AAF362-001 centre of gravity (x-axis)
AAF363-001 centre of gravity (y-axis)
AAF364-001 probability distribution
AAF365-001 normal average value
AAF366-001 normal standard deviation
AAF367-001 Poisson variance value
AAF368-001 Poisson expectation value
AAF369-001 test voltage coefficient
AAF370-001 MIL specification
AAF372-001 preformed lead
AAF388-001 case size
AAF391-001 connect-node code
AAF392-001 project view code
AAF393-001 x-coordinate of the reference point
AAF394-001 y-coordinate of the reference point
AAF395-001 z-coordinate of the reference point
AAF396-001 scale
AAF397-001 net area
AAF398-001 gross area
AAF399-001 net space
AAF400-001 gross space
AAF401-001 x-coor. preferred mounting position
AAF402-001 x-coor. preferred mounting position
AAF403-001 z-coor. preferred mounting position
AAF404-001 mounting deviation y/z
AAF405-001 mounting deviation y/x
AAF406-001 x-coordinate position location
AAF407-001 y-coordinate position location
AAF408-001 z-coordinate position location
AAF409-001 cylinder radius
AAF410-001 cylinder height
AAF411-001 angle axis to x-axis
AAF412-001 angle axis to y-axis
AAF413-001 angle axis to z-axis
AAF414-001 cone radius
AAF415-001 cone height
AAF416-001 semi angle
AAF417-001 sphere radius
AAF418-001 x-coordinate of centre
AAF419-001 y-coordinate of centre
AAF420-001 z-coordinate of centre
AAF421-001 major radius of torus
AAF422-001 minor radius of torus
AAF423-001 wedge x-size
AAF424-001 wedge y-size
AAF425-001 wedge z-size
AAF426-001 major edge
AAF427-001 minor edge
AAF428-001 primitive height
AAF429-001 edge-length
AAF430-001 internal radius
AAF431-001 external radius
AAF432-001 minor radius
AAF433-001 installation instruction
AAF435-001 terminal connection type
AAF436-001 simultaneity factor
AAF437-001 column type

AAE001-005 main class of component

Subclasses
AAA002-003 Electric/electronic components
AAA147-001 Electromechanical components
AAA215-001 Magnetic parts

AAA002-003 01

Electric/electronic components EE

A set of electric/electronic components of which each component can be described with the same group of data element types.

NOTE
ELECTRIC/ELECTRONIC COMPONENTS are groups of components, as used in the classification to indicate a class of functions with a common set of data elements.

Properties
AAE007-005 terminal shape
AAE008-005 terminal placement
AAE023-005 terminal diameter
AAE024-005 terminal pitch
AAE027-005 mounted height
AAE072-005 terminal length
AAE149-005 safety approval
AAE257-005 power dissipation
AAE259-005 shape/size code BSI
AAE267-005 rated temperature
AAE347-005 CECC specification
AAE540-005 current rms
AAE633-005 lacquered length
AAE634-005 terminal material
AAE688-005 thermal resistance
AAE785-005 signal type
AAE841-005 storage temperature
AAE891-005 ambient temperature
AAE905-005 dissipation derating factor
AAE987-005 power consumption
AAF316-001 hole pitch
AAF317-001 flange length
AAF319-001 flange height
AAF320-001 body diameter
AAF321-001 pitch (x-axis)
AAF322-001 pitch (y-axis)
AAF337-001 pitch circle diameter
AAF338-001 terminal breadth
AAF339-001 terminal thickness
AAF340-001 offset (y-axis)
AAF341-001 offset (x-axis)
AAF342-001 flange diameter
AAF343-001 mounting method
AAF344-001 body shape
AAF345-001 terminal exit position SMD
AAF346-001 terminal exit position non-SMD
AAF347-001 terminal shape non-SMD
AAF348-001 terminal shape SMD
AAF351-001 number of holes
AAF352-001 basic aspect
AAF353-001 size code EIA
AAF371-001 adjuster placement
AAF373-001 number of studs
AAF374-001 number of pitches (x-axis)
AAF375-001 number of pitches (y-axis)
AAF376-001 terminal cross-section shape
AAE002-006 category EE component

Subclasses
AAA003-001 Amplifiers
AAA013-001 Antennas
AAA017-001 Batteries
AAA020-001 Capacitors
AAA032-001 Conductors
AAA041-001 Delay lines
AAA042-001 Diode devices
AAA578-001 Fibre optics
AAA056-002 Filters
AAA057-001 Integrated circuits
AAA074-002 Inductors
AAA075-001 Lamps
AAA076-001 Liquid crystal displays
AAA229-001 Microwave components
AAA077-001 Optoelectronic devices
AAA087-001 Oscillators
AAA088-001 Piezoelectric devices
AAA232-001 Printed wiring circuits
AAA089-002 Resistors
AAA596-001 Resonators
AAA103-001 Sensors
AAA595-001 Spark gaps
AAA111-001 Transformers
AAA118-001 Transistors
AAA131-001 Trigger devices
AAA138-001 Tubes
AAA146-001 Tuners

AAA003-001 02

Amplifiers AMP

A set of amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
AMPLIFIERS are active two-port devices essentially designed to produce an output signal of greater power than that of the input signal. IEC 60050(702) (1992)

Properties
AAE697-005 current consumption
AAE969-005 amplifier package
AAE974-005 input standing wave ratio
AAE975-005 output standing wave ratio

AAF146-005 frequency application

Subclasses
AAA004-001 Low-frequency amplifiers
AAA011-001 Radio frequency amplifiers
AAA012-001 Wideband amplifiers

AAA004-001 02

Low-frequency amplifiers LF

A set of low-frequency amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
LOW-FREQUENCY AMPLIFIERS are amplifiers designed for use with baseband unmodulated signals, for example audio, video and switching signals.

AAF169-005 amplified quantity

Subclasses
AAA005-001 Power amplifiers
AAA006-001 Voltage amplifiers

AAA005-001 02

Power amplifiers PWA

A set of power amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
POWER AMPLIFIERS are amplifiers optimized to deliver output power to the load. Normally the voltage gain is insignificant and the power gain is thus mainly due to current gain.

AAA006-001 02

Voltage amplifiers VTA

A set of voltage amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
VOLTAGE AMPLIFIERS are amplifiers designed primarily to amplify the signal voltage, without supplying appreciable power.

Properties
AAF158-005 output voltage peak-to-peak
AAF159-005 large-signal voltage gain
AAF162-005 slew rate
AAF165-005 output resistance
AAF166-005 unity-gain frequency
AAF167-005 gain bandwidth product
AAF168-005 total response time

AAF191-005 input configuration

Subclasses
AAA007-001 Differential amplifiers
AAA010-001 Single-sided amplifiers

AAA007-001 02

Differential amplifiers DFA

A set of differential amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
DIFFERENTIAL AMPLIFIERS are amplifiers whose output signal is proportional to the algebraic difference between the voltages applied to their two inputs.

Properties
AAF157-005 common-mode input voltage
AAF160-005 common-mode rejection ratio
AAF163-005 differential input resistance
AAF164-005 common-mode input resistance

AAF192-005 coupling method

Subclasses
AAA008-001 Operational amplifiers
AAA009-001 AC-coupled amplifiers

AAA008-001 02

Operational amplifiers OPA

A set of operational amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
OPERATIONAL AMPLIFIERS are high-gain differential dc-coupled amplifiers.

Properties
AAF152-005 input offset current
AAF153-005 temp coef input offset current
AAF154-005 average bias current
AAF155-005 input offset voltage
AAF156-005 temp coef input offset voltage
AAF161-005 supply voltage sensitivity
AAF170-005 power supply rejection ratio

AAA009-001 02

AC-coupled amplifiers ACA

A set of ac-coupled amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
AC-COUPLED AMPLIFIERS are differential ac-coupled amplifiers.

AAA010-001 02

Single-sided amplifiers SSA

A set of single-sided amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
SINGLE-SIDED AMPLIFIERS are amplifiers of which one input terminal is directly connected to earth.

AAA011-001 02

Radio frequency amplifiers RF

A set of RF amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
RADIO FREQUENCY AMPLIFIERS are amplifiers designed for use with signals modulated on a radio-frequency carrier. IEC 60050(702) (1992)

AAA012-001 02

Wideband amplifiers WB

A set of wideband amplifiers of which each amplifier can be described with the same group of data element types.

NOTE
WIDEBAND AMPLIFIERS are amplifiers designed for uniform operation within a broad range of frequencies, usually accommodating several signal channels.

Properties
AAE424-005 power gain
AAE698-005 output voltage
AAE699-005 composite triple beat
AAE700-005 2nd-order beat
AAE701-005 input return losses
AAE702-005 output return losses
AAE703-005 cross modulation
AAE705-005 slope cable equivalent
AAE706-005 conformity of frequency response

AAA013-002 02

Antennas ANT

A set of antennas of which each antenna can be described with the same set of data element types.

NOTE
ANTENNAS are transducers which either emit radio frequency power into space from a signal source or intercepts an arriving electromagnetic field, converting it into an electric signal. IEC 60747-1 (1983)

Properties
AAE340-005 effective frequency f_e2
AAE341-005 effective frequency f_e1

AAE511-007 impedance type

Subclasses
AAA014-001 Capacitive antennas
AAA015-001 Inductive antennas
AAA016-001 Resistive antennas

AAA014-001 02

Capacitive antennas CAP

A set of capacitive antennas of which each antenna can be described with the same group of data element types.

NOTE
CAPACITIVE ANTENNAS are antennas in which, under given conditions, the predominant function is effected by means of capacitance.

Properties
AAE996-005 number of sections
AAE997-005 extended length
AAE998-005 non-extended length

AAA015-001 02

Inductive antennas IND

A set of inductive antennas of which each antenna can be described with the same group of data element types.

NOTE
INDUCTIVE ANTENNAS are antennas in which, under given conditions, the predominant function is effected by means of inductance.

Properties
AAE151-005 winding configuration
AAE517-005 inductance
AAE518-005 quality factor

AAA016-001 02

Resistive antennas RES

A set of resistive antennas of which each antenna can be described with the same group of data element types.

NOTE
RESISTIVE ANTENNAS are antennas in which, under given conditions, the predominant function is effected by means of resistance.

AAA017-001 02

Batteries BAT

A set of batteries of which each battery can be described with the same group of data element types.

NOTE
BATTERIES are electrochemical energy sources consisting of one or more cells. (derivation)

Properties
AAE262-005 encapsulation technology
AAE529-005 open-circuit voltage
AAE530-005 nominal capacity
AAE940-005 number of cells in series
AAE942-005 storage life

AAE510-005 chargeability type

Subclasses
AAA018-001 Primary batteries
AAA019-001 Secondary batteries

AAA018-001 02

Primary batteries PRI

A set of primary batteries of which each battery can be described with the same group of data element types.

NOTE
PRIMARY BATTERIES are electrochemical systems (batteries) designed for delivery of electric energy in one single uninterrupted (continuous) or interrupted (intermittent) discharge. IEC 60086-1 (2000)

Properties
AAE531-005 primary electrochemical system

AAA019-001 02

Secondary batteries SEC

A set of secondary batteries of which each battery can be described with the same group of data element types.

NOTE
SECONDARY BATTERIES are electrochemical systems (batteries) capable of storing in chemical form the electric energy received and which can give it back by reconversion. (derivation) IEC 60050(486) (1991)

Properties
AAE532-005 secondary electrochemical system
AAE941-005 voltage during charge
AAE943-005 charge time
AAE944-005 number of charge cycles

AAA020-001 02

Capacitors CAP

A set of capacitors of which each capacitor can be described with the same group of data element types.

NOTE
CAPACITORS are systems of two conductors (plates) separated over the extent of their surfaces by a thin insulating medium (dielectric), their intended characteristic being capacitance.

Properties
AAE010-005 climatic category
AAE030-005 E series
AAE044-005 rated voltage (dc)
AAE065-005 tangent of loss angle
AAE067-005 temperature coefficient (cap)
AAF360-001 max range value
AAF361-001 min range value
AAJ053-001 category voltage
AAJ054-001 surge voltage
AAJ055-001 rated temperature
AAJ056-001 category temperature
AAJ057-001 capacitance change with temperature
AAJ058-001 impedance of a capacitor

AAE003-006 adjustability type

Subclasses
AAA021-003 Fixed capacitors
AAA031-002 Variable capacitors

AAA021-003 01

Fixed capacitors FIX

A set of fixed capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED CAPACITORS are capacitors that are designed so that the spatial relationship of their parts cannot be changed.

Properties
AAE009-005 performance grade
AAE018-001 capacitance lower tolerance (%)
AAE034-005 circuit application (capacitor)
AAE036-005 safety class
AAE046-005 capacitance
AAE047-001 capacitance upper tolerance (%)
AAE063-005 insulation resistance
AAE066-005 time constant (of capacitor)
AAE071-005 capacitance tolerance
AAE262-005 encapsulation technology
AAE268-001 capacitance upper tolerance
AAE269-001 capacitance lower tolerance
AAF462-001 toleranced capacitance
AAJ008-001 size code

AAE004-007 dielectric material type

Subclasses
AAA022-001 Fixed air capacitors
AAA023-001 Fixed ceramic capacitors
AAA026-002 Fixed electrolytic capacitors
AAA027-001 Fixed film capacitors
AAA028-001 Fixed glass capacitors
AAA029-002 Fixed mica capacitors
AAA030-001 Fixed paper capacitors
AAA505-001 Fixed mixed-dielectric capacitors

AAA022-001 02

Fixed air capacitors AIR

A set of fixed air capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED AIR CAPACITORS are fixed capacitors with a dielectric consisting of air.

AAA023-001 02

Fixed ceramic capacitors CER

A set of fixed ceramic capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED CERAMIC CAPACITORS are fixed capacitors with a dielectric consisting of a ceramic material.

AAE038-005 dielectric class (ceramic cap)

Subclasses
AAA024-001 Fixed class1 ceramic capacitor
AAA025-001 Fixed class2 ceramic capacitor

AAA024-001 02

Fixed class1 ceramic capacitor CL1

A set of fixed ceramic capacitors class1 of which each capacitor can be described with the same group of data element types.

NOTE
FIXED CLASS1 CERAMIC CAPACITORS are ceramic capacitors specially designed and suited for resonant circuit application where low losses and high stability of capacitance are essential or where a precisely defined temperature coefficient is required. The ceramic dielectric is defined by their rated temperature coefficient (alpha). IEC 60384-8 (1988)

Properties
AAE035-005 temperature coefficient code
AAE266-005 dielectric subclass 1

AAA025-001 02

Fixed class2 ceramic capacitor CL2

A set of fixed ceramic capacitors class2 of which each capacitor can be described with the same group of data element types.

NOTE
FIXED CLASS2 CERAMIC CAPACITORS are ceramic capacitors which have a dielectric with a high permittivity and which are suitable for by-pass and coupling applications or for frequency discriminating circuits where low losses and high stability of capacitance are not of major importance. The ceramic dielectric is characterized by the non-linear change of capacitance over the category temperature range. IEC 60384-9 (1988)

Properties
AAE037-005 EIA temperature characteristic
AAE076-005 dielectric subclass 2

AAA026-002 01

Fixed electrolytic capacitors ELC

A set of fixed electrolytic capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED ELECTROLYTIC CAPACITORS are fixed capacitors in which the electrolytically formed oxide layer on the surface of the anode serves as a dielectric and having a solid or non-solid electrolyte forming the cathode, usually having polar properties.

Properties
AAE040-005 electrode material type
AAE041-005 shelf life
AAE042-005 leakage current short-term
AAE043-005 leakage current continuous
AAE064-005 equivalent series resistance
AAE073-005 endurance
AAE263-005 polarity type
AAE960-005 ripple current
AAJ051-001 electrolyte type
AAJ052-001 anode type

AAJ001-001 electrolytic capacitor type

Subclasses
AAA501-001 Solid tantalum
AAA502-001 Non-solid tantalum
AAA503-001 Solid aluminium
AAA504-001 Non-solid aluminium

AAA027-001 02

Fixed film capacitors FLM

A set of fixed film capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED FILM CAPACITORS are fixed capacitors with a dielectric consisting of a plastic film.

Properties
AAE031-005 electrode technology
AAE033-005 voltage application
AAE039-005 film dielectric material
AAE045-005 rated voltage (ac)

AAA028-001 02

Fixed glass capacitors GLS

A set of fixed glass capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED GLASS CAPACITORS are fixed capacitors with a dielectric consisting of glass.

AAA029-002 01

Fixed mica capacitors MICA

A set of fixed mica capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED MICA CAPACITORS are fixed capacitors with a dielectric consisting of mica.

AAA030-001 02

Fixed paper capacitors PAP

A set of fixed paper capacitors of which each capacitor can be described with the same group of data element types.

NOTE
FIXED PAPER CAPACITORS are fixed capacitors with a dielectric consisting of paper, usually impregnated.

AAA031-002 01

Variable capacitors VAR

A set of variable capacitors of which each capacitor can be described with the same group of data element types.

NOTE
VARIABLE CAPACITORS are capacitors designed so that their main property can be varied by mechanically changing the spatial relationship of their parts.

Properties
AAE068-005 maximum capacitance
AAE069-005 minimum capacitance
AAE070-005 adjustability class
AAE106-005 number of functions
AAE172-005 ganging number
AAF014-005 driving feature
AAJ002-001 variable capacitor type

AAA032-001 02

Conductors CND

A set of conductors of which each conductor can be described with the same group of data element types.

NOTE
CONDUCTORS are components containing one or more electric conductors.

Properties
AAF240-005 conductor finish
AAF241-005 conductive material
AAF242-006 conductor shape
AAF243-005 conductor configuration
AAF244-005 conductor size AWG
AAF245-005 dc resistance
AAF246-005 conductor diameter
AAF247-005 cross-section
AAF434-001 bending radius

AAF239-005 bare/insulated

Subclasses
AAA033-001 Bare conductors
AAA034-001 Insulated conductors

AAA033-001 02

Bare conductors BAR

A set of bare conductors of which each conductor can be described with the same group of data element types.

NOTE
BARE CONDUCTORS are conductors consisting of a single uninsulated conductive part.

AAA034-001 02

Insulated conductors INS

A set of insulated conductors of which each conductor can be described with the same group of data element types.

NOTE
INSULATED CONDUCTORS are conductors containing one or more insulated conductive parts.

Properties
AAF248-005 insulating material
AAF251-005 test voltage minimum

AAF249-005 cable/wire

Subclasses
AAA035-001 Cables
AAA040-001 Insulated wires

AAA035-001 02

Cables CBL

A set of cables of which each cable can be described with the same group of data element types.

NOTE
CABLES (electric) are an assembly of conductors insulated from one another and enclosed in a common binding or sheathing, and having some degree of flexibility.

Properties
AAF252-005 MIL cable type
AAF254-005 cable configuration
AAF255-005 number of cable elements
AAF258-005 working voltage
AAF259-005 capacitance between conductors

AAE152-005 power/signal

Subclasses
AAA036-001 Power cables
AAA037-001 Signal cables

AAA036-001 02

Power cables **POW**

A set of power cables of which each cable can be described with the same group of data element types.

NOTE
POWER CABLES are cables designed for the purpose of handling energy.

AAA037-001 02

Signal cables **SIG**

A set of signal cables of which each cable can be described with the same group of data element types.

NOTE
SIGNAL CABLES are cables designed for the purpose of handling a signal.

AAF146-005 frequency application

Subclasses
AAA038-001 LF cables
AAA039-001 RF cables

AAA038-001 02

LF cables **LF**

A set of low-frequency cables of which each cable can be described with the same group of data element types.

NOTE
LF CABLES are cables designed for use with baseband unmodulated signals, for example audio, video and switching signals.

Properties
AAF253-005 LF cable element

AAA039-001 02

RF cables **RF**

A set of RF cables of which each cable can be described with the same group of data element types.

NOTE
RF CABLES are cables designed for use with signals modulated on a radio-frequency carrier.

Properties
AAF256-005 RF cable element
AAF257-005 dielectric construction
AAF260-005 characteristic impedance
AAF261-005 attenuation

AAA040-001 02

Insulated wires **IWR**

A set of insulated wires of which each wire can be described with the same group of data element types.

NOTE
INSULATED wires are conductors consisting of a single insulated conductive part.

Properties
AAF250-005 colour code
AAF262-005 wire application

AAA041-001 02

Delay lines **DEL**

A set of delay lines of which each delay line can be described with the same group of data element types.

NOTE
DELAY LINES are linear two-port devices designed to introduce a desired delay in the transmission of a signal, without modifying the other characteristics of the signal.

Properties
AAE442-005 colour TV transmission
AAE534-005 bandwidth
AAE541-005 frequency
AAE542-005 delay line application
AAE543-005 delay time
AAE544-005 phase delay time
AAE877-005 working principle
AAE878-006 delay line type
AAE879-005 spurious signal level (3-tau)
AAE880-005 spurious signal level
AAE885-005 phase relation
AAE886-005 phase delay drift
AAE887-005 insertion loss

AAA042-001 02

Diode devices **DID**

A set of diode devices of which each device can be described with the same group of data element types.

NOTE
DIODE DEVICES are components built up of one or more two-terminal semiconductor devices and which can contain also resistors and/or capacitors.

Properties
AAF275-002 junction stress temperature

AAF305-005 category of diode device

Subclasses
AAA043-001 Bridge rectifiers
AAA044-001 Diodes
AAA055-001 Voltage multipliers

AAA043-001 02

Bridge rectifiers BRI

A set of bridge rectifiers of which each bridge rectifier can be described with the same group of data element types.

NOTE
BRIDGE RECTIFIERS are full-wave rectifiers with four elements connected as a bridge circuit with dc voltage obtained from one pair of opposite junctions when alternating current is applied to the other pair.

Properties
AAE284-005 peak inrush current limit
AAE285-005 non-rep peak input current limit
AAE286-005 average output current
AAE287-005 repetitive peak output current
AAE290-005 repetitive peak input voltage
AAE291-005 rms input voltage
AAE292-005 crest working input voltage

AAA044-002 02

Diodes DIO

A set of diodes of which each diode can be described with the same group of data element types.

NOTE
DIODES are two-terminal semiconductor devices having an asymmetric voltage-current characteristic.

Properties
AAE276-005 reverse current
AAE277-005 reverse voltage
AAE279-005 forward voltage
AAE331-005 diode package
AAE337-005 junction temperature
AAE489-005 diode technology
AAE494-005 nearest conventional type
AAE496-005 diode capacitance
AAE546-005 forward current limit

AAE273-007 diode application

Subclasses
AAA045-001 Breakover diodes
AAA046-001 Rectifier diodes
AAA047-001 Signal diodes
AAA048-001 Stabilizer diodes
AAA054-001 Variable capacitance diodes

AAA045-001 02

Breakover diodes BOD

A set of breakover diodes of which each diode can be described with the same set of data element types.

NOTE
BREAKOVER DIODES are two-terminal semiconductor devices that operate in either an OFF (non-conducting) state or an ON (conducting) state, reaching the conducting state when a voltage of specified minimum value (breakover voltage) is applied across their terminals and then conducting with a low ON-state voltage until the current is reduced below the minimum holding current.

Properties
AAE488-005 diode configuration

AAA046-001 02

Rectifier diodes REC

A set of rectifier diodes of which each diode can be described with the same group of data element types.

NOTE
RECTIFIER DIODES are semiconductor diodes designed for rectification and including their associated mounting and cooling attachments if integral with them.

Properties
AAE281-005 reverse recovery time
AAE293-005 repetitive peak forward current
AAE294-005 non-repetitive peak forward current
AAE296-005 working peak forward current
AAE297-005 repetitive peak reverse current
AAE299-005 crest working reverse voltage
AAE301-005 non-repetitive peak reverse voltage
AAE302-005 repetitive peak reverse power
AAE303-006 non-rep peak reverse power diss
AAE304-005 non-rep peak rev avalanche energy
AAE305-005 Joule-integral
AAE306-005 total reverse recovery time
AAE336-005 mounting base temperature
AAE488-005 diode configuration
AAE503-005 EHT stack application
AAE505-005 rectifier diode application
AAE966-005 average forward current
AAF301-005 reverse recovery time (I)
AAF302-005 breakdown voltage

AAA047-001 02

Signal diodes SIGD

A set of signal diodes of which each diode can be described with the same group of data element types.

NOTE
SIGNAL DIODES are diodes used for the purpose of extracting or processing information contained in an electrical signal which varies with time and may be either analogue or digital.

Properties
AAE281-005 reverse recovery time
AAE293-005 repetitive peak forward current
AAE294-005 non-repetitive peak forward current
AAE300-005 repetitive peak reverse voltage
AAE301-005 non-repetitive peak reverse voltage
AAE302-005 repetitive peak reverse power
AAE303-006 non-rep peak reverse power diss
AAE310-005 diode forward resistance

AAE487-005 frequency band
AAE488-005 diode configuration
AAE490-005 modulation method
AAE966-005 average forward current
AAF301-005 reverse recovery time (I)

AAA048-001 02

Stabilizer diodes STB

A set of stabilizing diodes of which each diode can be described with the same group of data element types.

NOTE
STABILIZER DIODES are diodes exhibiting a breakdown caused by the transition of electrons from the valence band to the conduction band due to tunnel action under the influence of a strong electric field in the reverse direction. IEC 60050-521 (2002)

Properties
AAE318-005 non-repetitive peak reverse current
AAE327-006 non-rep peak reverse power diss
AAF389-001 non-rep peak reverse power diss

AAE312-005 diode function

Subclasses
AAA049-001 Current regulator diodes
AAA050-001 Voltage reference diodes
AAA051-001 Voltage regulator diodes
AAA052-001 Stabistor diodes
AAA053-001 Transient suppressor diodes

AAA049-001 02

Current regulator diodes CUR

A set of current regular diodes of which each diode can be described with the same group of data element types.

NOTE
CURRENT REGULATOR DIODES are diodes that limit current to an essentially constant value over a specified voltage range.

AAA050-001 02

Voltage reference diodes REF

A set of voltage reference diodes of which each diode can be described with the same group of data element types.

NOTE
VOLTAGE REFERENCE DIODES are diodes which develop a reference voltage of specified accuracy across their terminals, when biased to operate within a specified current range. IEC 60747-1 (1983)

Properties
AAE316-005 working current
AAE317-005 peak working current
AAE322-005 temperature coefficient S_Z
AAE323-005 differential resistance
AAE324-005 working voltage

AAA051-001 02

Voltage regulator diodes REG

A set of voltage regulator diodes of which each diode can be described with the same group of data element types.

NOTE
VOLTAGE REGULATOR DIODES are diodes which develop an essential constant voltage across their terminals throughout a specified current range. IEC 60747-1 (1983)

Properties
AAE316-005 working current
AAE317-005 peak working current
AAE322-005 temperature coefficient S_Z
AAE324-005 working voltage
AAE328-005 differential resistance

AAA052-001 02

Stabistor diodes STA

A set of stabistor diodes of which each diode can be described with the same group of data element types.

NOTE
STABISTOR DIODES are diodes having closely controlled conductance, controlled storage charge, and low leakage, as required for clippers, clamping circuits, bias regulators, and other logic circuits that require tight voltage-level tolerance.

Properties
AAE293-005 repetitive peak forward current
AAE300-005 repetitive peak reverse voltage
AAE328-005 differential resistance
AAE329-005 temperature coefficient S_F

AAA053-001 02

Transient suppressor diodes SUP

A set of transient suppressor diodes of which each diode can be described with the same group of data element types.

NOTE
TRANSIENT SUPPRESSOR DIODES are diodes utilizing the steep slope of the blocking current-voltage characteristics of selenium plates for limiting transient overvoltages. Suppressors may be of two types: a Polarized: Selenium transient overvoltage suppressor having an asymmetrical current-voltage characteristic; Non-polarized: Selenium transient overvoltage suppressor having a symmetrical current-voltage characteristic.

Properties
AAE313-005 clamping voltage
AAE316-005 working current

AAA054-001 02

Variable capacitance diodes VARD

A set of variable capacitor diodes of which each diode can be described with the same group of data element types.

NOTE
VARIABLE CAPACITANCE DIODES are diodes that are designed so that their capacitance can be varied by changing the voltage between their terminals.

Properties
AAE310-005 diode forward resistance
AAE311-005 diode reverse resistance
AAE487-005 frequency band
AAE488-005 diode configuration
AAE490-005 modulation method
AAE502-005 capacitance ratio
AAF303-005 diode upper capacitance
AAF304-005 diode lower capacitance

AAA055-001 02

Voltage multipliers VMP

A set of voltage multipliers of which each multiplier can be described with the same group of data element types.

NOTE
VOLTAGE MULTIPLIERS are rectifier circuits capable of supplying a dc output voltage that is greater than (generally two or more times) the peak value of the ac input voltage.

Properties
AAE282-005 output current EHT supply
AAE283-005 output current focus supply
AAE288-005 input voltage peak-to-peak
AAE289-005 output voltage EHT supply
AAE290-005 repetitive peak input voltage

AAA056-002 01

Filters FIL

A set of filters of which each filter can be described with the same group of data element types.

NOTE
FILTERS ARE linear two-port devices designed to transmit spectral components of signals according to a specified law, generally in order to pass the components in certain frequency bands and to attenuate those in other bands. IEC 60050(702) (1992)

Properties
AAE527-005 centre frequency
AAE533-005 input impedance
AAE534-005 bandwidth
AAE543-005 delay time
AAE888-005 spurious signal level (2-tau)
AAF044-005 output impedance
AAF119-005 frequency application
AAF120-005 comb depth
AAF121-005 pass-band attenuation
AAJ059-001 filter type

AAA057-001 02

Integrated circuits IC

A set of integrated circuits of which each integrated circuit can be described with the same group of data element types.

NOTE
INTEGRATED CIRCUITS are circuits in which all or some of the circuit elements are inseparably associated and electrically interconnected so that they are considered to be indivisible for the purpose of construction and commerce. IEC 60748-1 (2002)

Properties
AAE074-005 IC application field
AAE086-005 supply voltage limit
AAE106-005 number of functions
AAE210-005 input voltage limit
AAE214-005 power dissipation per output
AAE336-005 mounting base temperature
AAE337-005 junction temperature
AAE442-005 colour TV transmission
AAE458-005 number of inputs
AAE487-005 frequency band
AAE490-005 modulation method
AAE686-005 IC technology
AAE690-005 supply voltage
AAE691-005 supply current
AAE786-005 mode of operation
AAE838-005 IC package code
AAE898-005 input capacitance
AAF275-002 junction stress temperature

AAE077-005 signal type

Subclasses
AAA058-001 Analogue signal functions
AAA059-001 Digital signal functions
AAA072-001 Analogue/digital signal functi
AAA073-001 Periodic/dc functions

AAA058-001 02

Analogue signal functions ANA

A set of analoque signal function ICs of which each function can be described with the same group of data element types.

NOTE
ANALOGUE SIGNAL FUNCTIONS are functions designed to carry out operations on analogue signals.

Properties
AAE084-005 analogue function

AAA059-001 02

Digital signal functions DIG

A set of digital signal function ICs of which each function can be described with the same group of data element types.

NOTE
DIGITAL SIGNAL FUNCTIONS are functions designed to carry out operations on digital signals.

Properties
AAE092-005 HIGH-state output voltage
AAE093-005 HIGH-state output voltage ref
AAE094-005 LOW-state output voltage ref
AAE097-005 LOW-state output voltage
AAE217-005 input current limit
AAE218-005 output current limit
AAE223-005 input leakage current
AAE235-005 output fall time
AAE238-005 output rise time
AAE239-005 HIGH off-state output current
AAE240-005 LOW off-state output current
AAE254-005 LOW-state output current
AAE255-005 HIGH-state output current
AAE457-005 numeral system
AAE459-005 word size
AAE464-005 mode of control
AAE718-005 HIGH-state input voltage
AAE719-005 LOW-state input voltage
AAE787-005 input/output characteristic
AAE896-005 quiescent current
AAE897-005 additional quiescent current
AAE899-005 HIGH-state input current
AAE900-005 LOW-state input current
AAE901-005 HIGH-state supply current
AAE902-005 LOW-state supply current
AAE903-005 off-state supply current
AAF207-005 output short-circuit current
AAF323-005 interface compatibility

AAE085-005 digital function

Subclasses
AAA060-001 Combinational/sequential/interface
AAA061-001 Microcontrollers
AAA062-001 Microprocessors
AAA063-001 Programmable logic devices
AAA064-001 Storage functions

AAA060-001 03

Combinational/sequential/interface CSI

A set of combinatorial/sequential/interface function ICs of which each function can be described with the same group of data element types.

NOTE
COMBINATIONAL/SEQUENTIAL/INTERFACE is an abbreviated term for combinatorial, sequential and interface, as used in the classification to indicate a class of functions with a common set of data element types.

Properties
AAE231-005 propagation delay
AAE233-005 HIGH to LOW propagation time
AAE237-005 LOW to HIGH propagation time
AAE692-005 standby current disabled
AAE693-005 standby current enabled
AAE790-005 CSI functions
AAF208-005 positive-going threshold
AAF209-005 negative-going threshold
AAF210-005 hysteresis
AAF211-005 maximum clock frequency
AAF212-005 set-up time
AAF213-005 hold time
AAF214-005 output enable time
AAF215-005 output disable time
AAF216-005 pulse width HIGH
AAF217-005 pulse width LOW
AAF218-005 metastable window
AAF219-005 recovery time

AAA061-001 02

Microcontrollers MUC

A set of microcontrollers of which each microcontroller can be described with the same group of data element types.

NOTE
MICROCONTROLLERS are controllers whose elements have been miniaturized into an IC. They are generally dedicated to a single application, mainly real time control.

Properties
AAF223-005 machine cycle
AAF224-005 clock frequency
AAF225-005 internal clock frequency
AAF226-005 address bus width
AAF227-005 data bus width
AAF228-005 addressable storage size
AAF229-005 instruction rate
AAF230-005 number of internal registers
AAF324-005 instruction set
AAF325-005 interrupt type
AAF326-005 addressing mode
AAF327-005 on-chip memory
AAF328-005 I/O bus width
AAF329-005 number of peripherals
AAF330-005 peripheral word size

AAA062-001 02

Microprocessors MUP

A set of microprocessors of which each microprocessor can be described with the same group of data element types.

NOTE
MICROPROCESSORS are processors whose elements have been miniaturized into an IC.

Properties
AAF221-005 bus structure
AAF222-005 instruction set architecture
AAF223-005 machine cycle
AAF224-005 clock frequency
AAF225-005 internal clock frequency

AAF226-005 address bus width
AAF227-005 data bus width
AAF228-005 addressable storage size
AAF229-005 instruction rate
AAF230-005 number of internal registers
AAF324-005 instruction set
AAF325-005 interrupt type
AAF326-005 addressing mode
AAF328-005 I/O bus width

AAA063-001 02

Programmable logic devices PLD

A set of programmable logic devices of which each device can be described with the same group of data element types.

NOTE
PROGRAMMABLE LOGIC DEVICES are device consisting of a programmable AND array whose output terms are fed to a fixed or programmable. (a PLD may also include registers)

Properties
AAF231-005 PLD programmability

AAA064-002 02

Storage functions STO

A set of storage functions of which each function can be described with the same group of data element types.

NOTE
STORAGE FUNCTIONS are functional units in which data (information) can be placed, in which they can be retained and from which they can be retrieved. ISO 2382-11 (1987)

Properties
AAE474-005 storage size
AAE720-005 access time
AAF232-005 output data-valid time
AAJ098-001 address set-up time
AAJ099-001 address hold time
AAJ100-001 input set-up time
AAJ101-001 input hold time
AAJ102-001 clockset-up time
AAJ103-001 clock hold time
AAJ104-001 output hold time
AAJ105-001 transition time

AAE722-007 storage function

Subclasses
AAA065-001 Content addressable memory ICs
AAA066-001 Charge coupled device ICs
AAA067-001 Random access memory ICs
AAA070-001 Read only memory ICs
AAA071-001 Registers

AAA065-001 02

Content addressable memory ICs CAM

A set of content addressable memory ICs of which each memory can be described with the same group of data element types.

NOTE
CONTENT ADDRESSABLE MEMORY are memories that respond with all the data in a storage zone if a portion of that data matches the data used for addressing the memory. If a match could occur in more than one storage zone, then usually the data read out will be that contained in the storage zone having the lowest address value.

AAA066-001 02

Charge coupled device ICs CCD

A set of charge coupled device ICs of which each charge coupled device can be described with the same group of data element types.

NOTE
CHARGE COUPLED DEVICE ICs are charge-transfer devices that store charge in potential wells and transfers this charge almost completely as a packet by translating the position of the potential wells. This device operates by changing the position of the same packet of charge.

AAA067-001 02

Random access memory ICs RAM

A set of random access memory ICs of which each memory can be described with the same group of data element types.

NOTE
RANDOM ACCESS MEMORY ICs are memories that permit access to any of their address locations in any desired sequence.

AAF233-005 RAM type

Subclasses
AAA068-001 Dynamic ram ICs
AAA069-001 Static ram ICs

AAA068-001 02

Dynamic RAM ICs DRM

A set of dynamic RAM ICs of which each IC can be described with the same group of data element types.

NOTE
DYNAMIC RAM ICs are memories in which the cells (elements) require the repetitive application of control signals in order to retain the data stored. A dynamic memory may use dynamic addressing and/or sensing circuits. This definition applies whether or not the control signals are generated inside or outside the memory.

Properties
AAE721-005 access time from CAS
AAF331-006 refresh time interval
AAJ091-001 access time from address
AAJ092-001 access time from clock
AAJ093-001 burst-mode cycle time
AAJ094-001 random read/write cycle time
AAJ095-001 access time from RAS
AAJ096-001 clock frequency

AAA069-001 02

Static RAM ICs SRM

A set of static RAM ICs of which each IC can be described with the same group of data element types.

NOTE
STATIC RAM ICs are memories in which the data content is retained in the absence of control signals. A static memory may use dynamic addressing and/or sensing circuits.

Properties
AAF332-005 data retention current
AAF333-005 data retention voltage
AAF336-005 standby current chip disabled

AAA070-001 03

Read only memory ICs ROM

A set of read only memory ICs of which each memory can be described with the same group of data element types.

NOTE
READ ONLY MEMORY ICs are memories in which the content is intended to be read only and not to be altered during normal operation.

Properties
AAF235-005 virginity state
AAF236-005 ROM programmability
AAF237-005 programming current
AAF238-005 programming voltage

AAA071-001 02

Registers REGI

A set of registers of which each register can be described with the same group of data element types.

NOTE
REGISTERS are one-dimensional arrangements of bistable circuits by means of which information may be accepted, stored, and retrieved. (derivation)

Properties
AAF211-005 maximum clock frequency
AAF234-005 register type

AAA072-001 03

Analogue/digital signal functions AD

A set of analoque/digital signal function ICs of which each function can be described with the same group of data element types.

NOTE
ANALOGUE / DIGITAL SIGNAL FUNCTIONS indicate functions which involve analogue signals as well as digital signals.

Properties
AAE788-005 AD function

AAA073-001 02

Periodic/dc functions PER

A set of periodic/dc functions of which each function can be described with the same group of data element types.

NOTE
PERIODIC / DC FUNCTIONS indicate either periodic signals : signals f(x) of a real or complex variable with period T if f(x+T)=f(x) for every value of x; or dc signals : signals whose electric current flows in one direction only, as opposed to alternating current signal.

Properties
AAE789-005 periodic/dc function

AAA074-002 01

Inductors IND

A set of inductors of which each inductor can be described with the same group of data element types.

NOTE
INDUCTORS are devices consisting of one or more associated windings, with or without a magnetic core, for introducing inductance into an electric circuit.

Properties
AAE262-005 encapsulation technology
AAE517-005 inductance
AAE518-005 quality factor
AAE755-005 impedance
AAE756-005 impedance decrease
AAE758-005 frequency at Z_max
AAF052-005 resonance frequency
AAF090-005 dc resistance
AAF103-005 current dc
AAF151-005 adjustability type
AAJ076-001 inductance tolerance (%)
AAJ077-001 inductance tolerance

AAE003-006 adjustability type

Subclasses
AAA601-001 Fixed inductors
AAA602-001 Variable inductors

AAA075-001 02

Lamps LAM

A set of lamps of which each lamp can be described with the same group of data element types.

NOTE
LAMPS are sources made in order to produce an optical radiation, usually visible.

Properties
AAE519-005 nominal voltage
AAE521-005 nominal current
AAE522-005 mounting-cap code

AAA076-001 02

Liquid crystal displays LCD

A set of liquid crystal displays of which each display can be described with the same group of data element types.

NOTE
LIQUID CRYSTAL DISPLAYS are displays made of material whose reflectance or transmittance changes when an electric field is applied.

Properties
AAE839-005 driving method
AAE840-005 quality grade
AAE843-005 dc voltage component
AAE844-005 drive frequency
AAE845-005 specific current consumption
AAE846-005 turn-on time
AAE847-005 turn-off time
AAE848-005 contrast ratio
AAE849-005 display construction
AAE850-005 character length
AAE851-005 character height
AAE852-005 dot length
AAE853-005 dot height
AAE854-005 viewing area length
AAE855-005 viewing area height
AAE856-005 illumination mode
AAE984-005 digit height
AAE985-005 connection method
AAE986-005 dot spacing
AAE989-005 backlight
AAE990-005 specific capacitance
AAE991-005 preferred viewing direction
AAE992-005 operating voltage
AAF145-005 digit length

AAA077-001 02

Optoelectronic devices OPT

A set of optoelectronic devices of which each device can be described with the same group of data element types.

NOTE
OPTOELECTRONIC DEVICES are semiconductor devices that emit or detect or that are responsive to coherent or non-coherent optical radiation or that utilise such radiation for their internal purposes.

Properties
AAE276-005 reverse current
AAE277-005 reverse voltage
AAE279-005 forward voltage
AAE336-005 mounting base temperature
AAE337-005 junction temperature
AAE405-005 collector current (dc) max
AAE496-005 diode capacitance
AAE546-005 forward current limit
AAE816-005 optoelectronic package

AAE545-006 optoelectronic device function

Subclasses
AAA078-001 Photocouplers
AAA079-001 Photoemitters
AAA083-001 Photosensors
AAA597-001 Image pickup devices

AAA078-001 02

Photocouplers PHC

A set of photocouplers of which each photocoupler can be described with the same group of data element types.

NOTE
PHOTOCOUPLERS are semiconductor optoelectronic devices designed for the transfer of electric signals by utilizing radiant energy to provide coupling with electrical isolation between the input and the output.

Properties
AAE548-005 current transfer ratio
AAE550-005 isolation voltage min
AAE551-005 collector-emitter sat voltage
AAE553-005 turn-off time
AAE554-005 turn-on time
AAF066-005 collector-emitter breakdown voltage
AAF140-005 collector current light
AAF141-005 cut-off current dark I_CEO
AAF142-005 cut-off current dark I_CBO

AAA079-001 02

Photoemitters PHE

A set of photoemitters of which each photoemitter can be described with the same group of data element types.

NOTE
PHOTOEMITTERS are semiconductor optoelectronic devices that directly convert electric energy into optical radiant energy.

Properties
AAE556-005 wavelength at peak emission
AAE557-005 spectral bandwidth
AAE558-005 beamwidth between 50 % values
AAE563-005 LED crystal material

AAE555-005 photoemitter function

Subclasses
AAA080-001 Light emitting diodes
AAA081-001 Infrared light emitting diodes
AAA082-001 Lasers

AAA080-001 02

Light emitting diodes LED

A set of light emitting diodes of which each diode can be described with the same group of data element types.

NOTE
LIGHT EMITTING DIODES are semiconductor diodes, other than semiconductor lasers, capable of emitting visible radiation when excited by an electric current.

Properties
AAE560-005 package colour
AAE562-005 luminous intensity class
AAE564-005 LED light colour
AAE565-005 luminous intensity

AAA081-001 02

Infrared light emitting diodes IRD

A set of infrared light emitting diodes of which each emitting diode can be described with the same group of data element types.

NOTE
INFRARED LIGHT EMITTING DIODES are semiconductor diodes, other than semiconductor lasers, capable of emitting infrared radiation when excited by an electric current.

Properties
AAE560-005 package colour
AAE564-005 LED light colour
AAF064-005 radiant intensity
AAF065-005 total radiant output power

AAA082-001 02

Lasers LAS

A set of lasers of which each laser can be described with the same group of data element types.

NOTE
LASERS are semiconductor diodes that emit coherent optical radiation through stimulated emission resulting from the recombination of free electrons and holes when excited by an electric current that exceeds the threshold current of the diode.

Properties
AAE561-005 radiant output power

AAA083-001 02

Photosensors PHS

A set of photosensors of which each photosensor can be described with the same group of data element types.

NOTE
PHOTOSENSORS are semiconductor devices that utilise the photoelectric effect for detection of optical radiation.

Properties
AAE557-005 spectral bandwidth
AAE558-005 beamwidth between 50 % values
AAE567-005 spectral sensitivity
AAE568-005 wavelength at peak response
AAF138-005 collector current light
AAF139-005 collector cut-off current dark
AAF143-005 reverse current light
AAF144-005 reverse current dark

AAE566-005 radiation type

Subclasses
AAA084-001 Infrared light photosensors
AAA085-001 Ultraviolet light photosensors
AAA086-001 Visible light photosensors

AAA084-001 02

Infrared light photosensors IR

A set of infrared light photosensors of which each sensor can be described with the same group of data element types.

NOTE
INFRARED LIGHT PHOTOSENSORS are photosensors operating with an optical radiation for which the wavelengths are longer than those for visible radiation.

Properties
AAE571-005 responsivity
AAE572-005 equivalent noise irradiation
AAE573-005 spectral response lower limit
AAE574-005 spectral response upper limit
AAE575-005 element separation
AAE576-005 element length
AAE577-005 element breadth

AAA085-001 02

Ultraviolet light photosensors UV

A set of ultraviolet light sensors of which each sensor can be described with the same group of data element types.

NOTE
ULTRAVIOLET LIGHT PHOTOSENSORS are photosensors operating with an optical radiation for which the wavelengths are shorter than those for visible radiation.

AAA086-001 02

Visible light photosensors VIS

A set of visible light photosensors of which each photosensor can be described with the same group of data element types.

NOTE
VISIBLE LIGHT PHOTOSENSORS are photosensors operating with any optical radiation capable of causing a visual sensation directly.

AAA087-001 02

Oscillators OSC

A set of oscillators of which each oscillator can be described with the same group of data element types.

NOTE
OSCILLATORS are active devices producing a periodic quantity whose fundamental frequency is determined by the characteristics of the device.

AAA088-001 02

Piezoelectric devices PE

A set of piezoelectric devices of which each device can be described with the same group of data element types.

NOTE
PIEZOELECTRIC DEVICES are components that operate by the piezoelectric effect, i.e. electric polarisation caused by mechanical strain or conversely. (derivation)

AAA089-002 02

Resistors RES

A set of resistors of which each resistor can be described with the same group of data element types.

NOTE
RESISTORS are devices used because of their primary property of resistance.

Properties
AAE010-005 climatic category
AAE030-005 E series
AAE118-005 limiting element voltage (dc)
AAE635-001 resistor package
AAF097-005 stability after test
AAF100-005 resistance tolerance
AAF281-005 limiting element voltage (ac)
AAJ010-001 rated voltage

AAE003-006 adjustability type

Subclasses
AAA090-001 Fixed resistors
AAA100-003 Variable resistors

AAA090-002 02

Fixed resistors FIX

A set of fixed resistors of which each resistor can be described with the same group of data element types.

NOTE
FIXED RESISTORS are resistors designed so that their main property cannot be varied by mechanically changing the spatial relationship of their parts.

Properties
AAE115-005 maximum surface temperature
AAF266-005 inductance level
AAF349-001 insulation resistance
AAF350-001 temperature coefficient

AAE114-007 linearity of a fixed resistor

Subclasses
AAA091-001 Fixed linear resistors
AAA094-001 Fixed non-linear resistors

AAA091-002 02

Fixed linear resistors LIN

A set of fixed linear resistors of which each resistor can be described with the same group of data element types.

NOTE
FIXED LINEAR RESISTORS are fixed resistors in which the voltage across the terminals is proportional to the current passing through it.

Properties
AAE113-005 temperature coefficient
AAE116-005 resistive material
AAE119-005 resistance
AAE621-005 resistor noise index
AAF463-001 toleranced resistance

AAF101-006 multiplicity

Subclasses
AAA092-001 Single linear resistors
AAA093-002 Linear resistor networks

AAA092-001 02

Single linear resistors SIN

A set of single linear resistors of which each resistor can be described with the same group of data element types.

NOTE
SINGLE LINEAR RESISTORS are linear resistors of which each device contains only one linear resistor.

AAJ003-001 single resistor type

Su-classes
AAA509-001 Fixed precision resistors
AAA510-001 Fixed power resistors
AAA511-001 Fixed low-power resistors
AAA512-001 Fixed chip resistors
AAA513-001 Fixed thermostat resistors
AAA514-001 Fixed fusing resistors

AAA093-002 01

Linear resistor networks MUL

A set of linear resistor networks of which each resistor network can be described with the same group of data element types.

NOTE
LINEAR RESISTORS NETWORKS are linear resistors of which each device consists of, includes, or involves more than one linear resistor.

Properties
AAE106-005 number of functions
AAF102-005 resistor interconnection

AAA094-001 02

Fixed non-linear resistors NLN

A set of fixed non-linear resistors of which each resistor can be described with the same group of data element types.

NOTE
FIXED NON-LINEAR RESISTORS are fixed resistors in which the voltage across the terminals is not proportional to the current passing through it. [IEC 60050(811-27-16) (1991)]

AAE122-005 resistance dependency

Subclasses
AAA095-001 Light dependent resistors
AAA096-002 Temperature dependent resistor
AAA099-001 Voltage dependent resistors

AAA095-001 02

Light dependent resistors LDR

A set of light dependent resistors of which each resistor can be described with the same group of data element types.

NOTE
LIGHT DEPENDENT RESISTORS are resistors of which the resistance value decreases when it is exposed to electromagnetic radiation (usually in the visible region of the spectrum).

Properties
AAE123-005 dark resistance
AAE124-005 light resistance
AAE617-005 LDR recovery rate

AAA096-002 01

Temperature dependent resistor TDR

A set of temperature dependent resistors of which each resistor can be described with the same group of data element types.

NOTE
TEMPERATURE DEPENDENT RESISTORS are resistors of which the resistance value changes when the temperature is changed.

Properties
AAE127-005 resistance at 25 Cel
AAE130-005 dissipation factor
AAE131-005 thermal time constant
AAE625-005 thermistor current
AAJ073-001 thermal time-constant (power)

AAE126-005 thermistor type

Subclasses
AAA097-001 NTC thermistors
AAA098-002 PTC thermistors

AAA097-001 02

NTC thermistors NTC

A set of NTC thermistors of which each thermistor can be described with the same group of data element types.

NOTE
NTC THERMISTORS are thermistor in which the zero-power resistance decreases with increasing temperature.

Properties
AAE132-005 thermal sensitivity index B25/85
AAE616-005 thermal sensitivity index B25/75
AAF282-005 thermal sensitivity tolerance

AAA098-002 01

PTC thermistors PTC

A set of PTC thermistors of which each thermistor can be described with the same group of data element types.

NOTE
PTC THERMISTORS are thermistors which show a significant increase in zero-power resistance with increasing temperature over part of their operating temperature range.

Properties
AAE135-005 heat capacity
AAE136-005 trip current
AAE137-005 non-trip current
AAE138-005 switching temperature
AAE618-005 PTC application
AAE619-005 PTC peak inrush current
AAE620-005 PTC peak current
AAE626-005 PTC switching resistance
AAE629-005 PTC residual current
AAJ060-001 rated voltage
AAJ061-001 maximum operating voltage
AAJ062-001 maximum current
AAJ063-001 power consumption

AAA099-001 02

Voltage dependent resistors VDR

A set of voltage dependent resistors of which each resistor can be described with the same group of data element types.

NOTE
VOLTAGE DEPENDENT RESISTORS are resistors of which the resistance value has a very large variation depending on the applied voltage.

Properties
AAE298-005 non-rep varistor peak current
AAE319-005 maximum clamping voltage
AAE334-005 varistor voltage at 1 mA
AAE429-005 varistor capacitance
AAE430-005 energy absorbing capacity max

AAA100-003 01

Variable resistors VAR

A set of variable resistors of which each resistor can be described with the same group of data element types.

NOTE
VARIABLE RESISTORS are resistors designed so that their main property can be varied by mechanically changing the spatial relationship of their parts.

Properties
AAE113-005 temperature coefficient
AAE116-005 resistive material
AAE119-005 resistance
AAE146-005 ganging tolerance
AAE172-005 ganging number

AAE139-005 number of terminals

Subclasses
AAA101-001 Two-terminal variable resistors
AAA102-002 Potentiometers

AAA101-001 02

Two-terminal variable resistors TT

A set of two-terminal variable resistors of which each resistor can be described with the same group of data element types.

NOTE
TWO-TERMINAL VARIABLE RESISTORS are variable resistors having one moving contact and one fixed termination (for example a rheostat), distinguishing them from other variable resistors with at least three terminations (potentiometers).

AAA102-002 01

Potentiometers POT

A set of potentiometers of which each potentiometer can be described with the same group of data element types.

NOTE
POTENTIOMETERS are components for use as voltage dividers with three terminations of which two are connected to the ends of a resistive element and the third to a moving contact which can be moved mechanically along the resistive element.

Properties
AAE141-005 resistance law (IEC)
AAE142-005 actuator type
AAE144-005 mounting position
AAF014-005 driving feature

AAJ006-002 adjustability type

Subclasses
AAA607-001 Rotary precision potentiometers
AAA608-001 Power rotary potentiometers
AAA609-001 Low-power rotary potentiometers
AAA516-002 Preset potentiometers
AAA517-001 Slide potentiometers

AAA103-001 02

Sensors SEN

A set of sensors of which each sensor can be described with the same group of data element types.

NOTE
SENSORS are electric signal transducers that convert a signal of any kind into an electric signal.

Properties
AAE893-005 sensor working principle

AAE892-005 sensor input quantity

Subclasses
AAA104-001 Humidity sensors
AAA105-001 Light sensors
AAA106-001 Magnetic field sensors
AAA107-001 Nuclear sensors
AAA108-001 Pressure sensors
AAA109-001 Proximity sensors
AAA110-001 Temperature sensors

AAA104-001 02

Humidity sensors HUM

A set humidity sensors of which each sensor can be described with the same group of data element types.

NOTE
HUMIDITY SENSORS are sensors operating on humidity, i.e. mass of water vapour divided by the volume of the gaseous mixture.Actual humidity by volume, divided by humidity by volume at saturation, at the same temperature.

Properties
AAE857-005 operating humidity
AAE858-005 storage humidity
AAE860-005 reference capacitance
AAE861-005 sensitivity

AAA105-001 02

Light sensors LGT

A set of light sensors of which each sensor can be described with the same group of data element types.

NOTE
LIGHT SENSORS are sensors operating on light; i.e. any optical radiation capable of causing a visual sensation directly.

AAA106-001 02

Magnetic field sensors MGN

A set of magnetic filed sensors of which each sensor can be described with the same group of data element types.

NOTE
MAGNETIC FIELD SENSORS are sensors operating on magnetic fields.

Properties
AAE862-005 open-circuit sensitivity
AAE863-005 magnetic field strength

AAA107-001 02

Nuclear sensors NCL

A set of nuclear sensors of which each sensor can be described with the same group of data element types.

NOTE
NUCLEAR SENSORS are sensors operating on radiation released during reactions taking place in atomic nuclei.

AAA108-001 02

Pressure sensors PRS

A set of pressure sensors of which each sensor can be described with the same group of data element types.

NOTE
PRESSURE SENSORS are sensors operating on pressure; i.e. force divided by area.

Properties
AAE864-005 pressure mode
AAE865-005 sensitivity
AAE866-005 operating pressure

AAA109-001 02

Proximity sensors PRX

A set of proximity sensors of which each sensor can be described with the same group of data element types.

NOTE
PROXIMITY SENSORS are sensors operating on proximity, i.e. nearness in space.

Properties
AAE867-005 output current
AAE868-005 substrate temperature
AAE869-005 hysteresis in switching distance
AAE870-005 substrate length
AAE871-005 substrate width
AAE872-005 operating frequency

AAA110-001 02

Temperature sensors TMP

A set of temperature sensors of which each sensor can be described with the same group of data element types.

NOTE
TEMPERATURE SENSORS are sensors operating on temperature, i.e.intensity of heat.

Properties
AAE874-005 reference resistance
AAE875-005 resistance ratio R_Tamb/R_Tref
AAE876-005 temperature coefficient

AAA111-001 02

Transformers TFM

A set of transformers of which each transformer can be described with the same group of data element types.

NOTE
TRANSFORMERS are static pieces of apparatus with two or more windings which, by electromagnetic induction, transforms a system of alternating voltage and current into another voltage and current usually of different values at the same frequency.

Properties
AAE151-005 winding configuration
AAE155-005 insulation resistance
AAF047-005 screening
AAF090-005 dc resistance

AAE152-005 power/signal

Subclasses
AAA112-001 Power transformers
AAA115-002 Signal transformers

AAA112-001 02

Power transformers POW

A set of power transformers of which each transformer can be described with the same group of data element types.

NOTE
POWER TRANSFORMERS are transformers designed for the purpose of handling energy.

Properties
AAE158-005 clearance to earth
AAE159-005 creepage distance
AAE160-005 nominal output current
AAE163-005 input voltage
AAE165-005 output power
AAE166-005 operating frequency
AAF048-005 number of primary coils
AAF098-005 power transformer application
AAF099-005 number of secondary coils

AAE003-006 adjustability type

Subclasses
AAA113-001 Fixed power transformers
AAA114-001 Variable power transformers

AAA113-001 02

Fixed power transformers FIX

A set of fixed power transformers of which each transformer can be described with the same group of data element types.

NOTE
FIXED POWER TRANSFORMERS are power transformers designed so that their main property cannot be changed by the spatial relationship of their parts.

Properties
AAE164-005 no-load output voltage

AAA114-001 02

Variable power transformers VAR

A set of variable power transformers of which each transformer can be described with the same group of data element types.

NOTE
VARIABLE POWER TRANSFORMERS are power transformers designed so that their main property can be varied by mechanically changing the spatial relationship of their parts.

Properties
AAE167-005 transformer model
AAE168-005 maximum output current
AAE169-005 output voltage
AAE170-005 brush life
AAE171-005 brush life expectation
AAE172-005 ganging number
AAE173-005 total mechanical rotation

AAA115-002 01

Signal transformers SIG

A set of signal transformers of which each transformer can be described with the same group of data element types.

NOTE
SIGNAL TRANSFORMERS are transformers designed for the purpose of handling a signal.

Properties
AAE156-005 upper frequency
AAE157-005 lower frequency
AAJ075-001 signal transformer type

AAE003-006 adjustability type

Subclasses
AAA116-001 Fixed signal transformers
AAA117-001 Variable signal transformers

AAA116-001 02

Fixed signal transformers FIX

A set of fixed signal transformers of which each transformer can be described with the same group of data element types.

NOTE
FIXED SIGNAL TRANSFORMERS are signal transformers designed so that their main property cannot be changed by the spatial relationship of their parts.

AAA117-001 02

Variable signal transformers VAR

A set of variable signal transformers of which each transformer can be described with the same group of data element types.

NOTE
VARIABLE SIGNAL TRANSFORMERS are signal transformers designed so that their main property can be varied by mechanically changing the spatial relationship of their parts.

AAA118-001 02

Transistors TRA

A set of transistors of which each transistor can be described with the same group of data element types.

NOTE
TRANSISTORS are semiconductor devices capable of providing power amplification and having three or more terminals.

Properties
AAE337-005 junction temperature
AAE487-005 frequency band
AAE490-005 modulation method
AAE494-005 nearest conventional type
AAE637-005 transistor package
AAE968-005 complementary type
AAF275-002 junction stress temperature

AAE401-005 transistor technology

Subclasses
AAA119-001 Bipolar transistors
AAA126-001 Field-effect transistors

AAA119-002 02

Bipolar transistors BIP

A set of bipolar transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR TRANSISTORS are transistors having at least two junctions and whose functioning depends on both minority carriers and majority carriers (of opposite electric charge).

Properties
AAE402-005 dc current gain
AAE405-005 collector current (dc) max
AAE407-005 collector current peak value
AAE413-005 collector-emitter voltage V_CE
AAE414-005 collector-emitter voltage V_CE
AAE415-005 collector-emitter peak voltage
AAE416-005 collector-emitter sat voltage
AAE417-005 collector-base voltage V_CBO
AAE420-005 collector capacitance
AAE421-005 feedback capacitance
AAE425-005 transition frequency
AAE638-005 transistor polarity
AAE640-005 collector current ratio
AAE641-005 collector saturation current
AAF066-005 collector-emitter breakdown voltage
AAF109-005 collector cut-off current I_CB
AAF110-005 emitter cut-off current I_EBO
AAF112-005 emitter-base voltage V_EBO
AAF113-005 collector-emitter voltage V_CE
AAF114-005 base-emitter saturation voltage
AAF115-005 collector cut-off current I_CE
AAF116-005 collector-base capacitance
AAF117-005 emitter-base input capacitance

AAE971-007 signal handling type

Subclasses
AAA120-001 Bipolar power transistors
AAA123-001 Bipolar small signal transisto

AAA120-002 02

Bipolar power transistors POWT

A set of bipolar power transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR POWER TRANSISTORS are bipolar transistors, designed for power-signal applications, having a thermal resistance between junction and mounting base of 15 K/W or less.

Properties
AAE336-005 mounting base temperature
AAE422-005 output power
AAE424-005 power gain

AAF146-005 frequency application

Subclasses
AAA121-001 Bipolar lf power transistors
AAA122-001 Bipolar rf power transistors

AAA121-001 02

Bipolar LF power transistors LF

A set of bipolar LF power transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR LF POWER TRANSISTORS are bipolar power transistors designed for use with baseband unmodulated signals, for example audio, video and switching signals.

Properties
AAF055-005 delay (off) time
AAF056-005 delay (on) time
AAF057-005 fall time
AAF058-005 rise time
AAF059-005 turn-off time
AAF060-005 turn-on time

AAA122-001 02

Bipolar RF power transistors RF

A set of bipolar RF power transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR RF POWER TRANSISTORS are bipolar power transistors designed for use with signals modulated on a radio-frequency carrier.

Properties
AAE707-005 peak envelope power PEP
AAE711-005 intermodulation distortion d_im
AAE712-005 intermodulation distortion d_3
AAE714-005 synchronous output power
AAE715-005 efficiency

AAA123-002 02

Bipolar small signal transisto SIGT

A set of bipolar small-signal transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR SMALL SIGNAL TRANSISTORS are bipolar transistors, designed for small-signal applications, having a thermal resistance between junction and mounting base of more than 15 K/W.

Properties
AAE106-005 number of functions
AAE410-005 small-signal current gain
AAE418-005 difference base-emitter voltage
AAE426-005 cut-off frequency
AAE642-005 differential current change
AAE644-005 differential voltage change
AAE647-005 average noise figure
AAE648-005 spot noise figure

AAF146-005 frequency application

Subclasses
AAA124-001 Bipolar lf small signal transi
AAA125-001 Bipolar rf small signal transi

AAA124-001 02

Bipolar LF small signal transistors LF

A set of bipolar LF small-signal transistors of which each tansistor can be described with the same group of data element types.

NOTE
BIPOLAR LF SMALL SIGNAL TRANSISTORS are bipolar small signal transistors designed for use with baseband unmodulated signals, for example audio, video and switching signals.

Properties
AAF055-005 delay (off) time
AAF056-005 delay (on) time
AAF057-005 fall time
AAF058-005 rise time
AAF059-005 turn-off time
AAF060-005 turn-on time

AAA125-001 02

Bipolar RF small signal transistors RF

A set of bipolar RF small-signal transistors of which each transistor can be described with the same group of data element types.

NOTE
BIPOLAR RF SMALL SIGNAL TRANSISTORS are bipolar small signal transistors designed for use with signals modulated on a radio-frequency carrier.

Properties
AAE711-005 intermodulation distortion d_im
AAE712-005 intermodulation distortion d_3
AAE713-005 unilateral power gain

AAA126-002 02

Field-effect transistors FET

A set of field-effect transistors of which each transistor can be described with the same group of data element types.

NOTE
FIELD-EFFECT TRANSISTORS are transistors in which the current flowing through a conductor channel is controlled by an electric field arising from a voltage applied between the gate and source terminals.

Properties
AAE364-005 gate type
AAE366-005 channel type
AAE368-005 drain current (dc)
AAE370-005 drain current (dc)
AAE371-005 drain cut-off current
AAE372-005 gate cut-off current
AAE373-005 source cut-off current
AAE374-005 common-mode rejection ratio
AAE377-005 drain-source voltage limit
AAE379-005 drain-substrate voltage limit
AAE384-005 gate-source threshold voltage
AAE386-005 gate-source cut-off voltage
AAE387-005 source-substrate voltage limit
AAE390-005 feedback capacitance
AAE391-005 drain-source on-state resistance
AAE393-005 drain-source on-state resistance
AAE394-005 drain-source off-state resistance
AAE396-005 transfer admittance
AAE655-005 input capacitance at gate
AAE656-005 transfer conductance
AAE982-005 input capacitance
AAE983-005 output capacitance
AAF118-005 gate-source voltage limit

AAE971-007 signal handling type

Subclasses
AAA127-001 Field-effect power transistors
AAA130-001 Field-effect small signal tran

AAA127-002 02

Field-effect power transistors POWT

A set of field-efect transistors of which each transistor can be described with the same group of data element types.

NOTE
FIELD-EFFECT POWER TRANSISTORS are field-effect transistors designed for power-signal applications, having a thermal resistance between junction and mounting base of 15 K/W or less.

Properties
AAE336-005 mounting base temperature

AAF146-005 frequency application

Subclasses
AAA128-001 Field-effect lf power transistors
AAA129-001 Field-effect rf power transistors

AAA128-001 02

Field-effect LF power transistors LF

A set of field-effect LF power transistors of which each transistor can be described with the same group of data element types.

NOTE
FIELD-EFFECT LF POWER TRANSISTORS are field-effect power transistors designed for use with baseband unmodulated signals, for example audio, video and switching signals.

Properties
AAE976-005 rise time
AAE977-005 fall time
AAE978-005 turn-on time
AAE979-005 turn-off time
AAE980-005 delay (on) time
AAE981-005 delay (off) time

AAA129-001 02

Field-effect RF power transist RF

A set of field-effect RF power transistors of which each transistor can be described with the same group of data element types.

NOTE
FIELD-EFFECT RF POWER TRANSISTORS are field-effect transistors designed for use with signals modulated on a radio-frequency carrier.

AAA130-001 02

Field-effect small signal transistors SIGT

A set of field-effect small-signal transistors of which each transistor can be described with the same group of data element types.

NOTE
FIELD-EFFECT SMALL SIGNAL TRANSISTORS are field-effect transistors designed for small-signal applications, having a thermal resistance between junction and mounting base of more than 15 K/W.

Properties
AAE380-005 equivalent noise voltage
AAE383-005 gate-source voltage difference
AAE389-005 thermal drift gate-source voltage
AAE657-005 spot noise figure
AAE716-005 difference in penetration factor
AAE717-005 difference in transfer impedance
AAE973-005 FET-technology
AAE976-005 rise time
AAE977-005 fall time
AAE978-005 turn-on time
AAE979-005 turn-off time
AAE980-005 delay (on) time
AAE981-005 delay (off) time

AAA131-001 02

Trigger devices TRG

A set of trigger devices of which each device can be described with the same group of data element types.

NOTE
TRIGGER DEVICES are bistable semiconductor devices comprising three or more junctions which can be switched from the off-state to the on-state or vice versa.

Properties
AAE331-005 diode package
AAE336-005 mounting base temperature
AAE337-005 junction temperature
AAF275-002 junction stress temperature

AAE724-005 trigger device function

Subclasses
AAA132-001 Diacs
AAA133-001 Thyristors
AAA137-001 Triacs

AAA132-001 02

Diacs DIA

A set of diacs of which each diac can be described with the same group of data element types.

NOTE
DIACS are bi-directional diode thyristors: two-terminal trigger devices having substantially the same behaviour in the first and third quadrants of the principal characteristic. IEC 60747-6 (2000)

Properties
AAE293-005 repetitive peak forward current
AAE725-005 breakover voltage
AAE726-005 output voltage

AAA133-001 02

Thyristors THY

A set of thyristors of which each thyristor can be described with the same group of data element types.

NOTE
THYRISTORS are three-terminal trigger devices having a different behaviour in the first and third quadrants of the principal characteristic.

Properties
AAE276-005 reverse current
AAE305-005 Joule-integral
AAE728-005 rms on-state current
AAE729-005 repetitive peak on-state current
AAE730-005 non-rep peak on-state current
AAE732-005 gate trigger current
AAE738-005 off-state voltage
AAE739-005 repetitive peak off-state voltage
AAE740-005 rate of rise of off-state voltage
AAE742-005 gate trigger voltage
AAE744-005 average on-state current
AAF135-005 off-state current
AAF136-005 holding current
AAF137-005 latching current

AAE743-005 thyristor function

Subclasses
AAA134-001 Fast turn-off thyristors
AAA135-001 Gate turn-off thyristors
AAA136-001 Reverse blocking thyristors

AAA134-001 02

Fast turn-off thyristors FTO

A set of fast turn-off thyristors of which each thyristor can be described with the same group of data element types.

NOTE
FAST TURN-OFF THYRISTORS are thyristors in which the current may be turned on or off in times of the order of 1μs

Properties
AAE734-005 rate of rise on-state current
AAE747-005 commutated turn-off time

AAA135-001 02

Gate turn-off thyristors GTO

A set of gate turn-off thyristors of which each thyristor can be described with the same group of data element types.

NOTE
GATE TURN-OFF THYRISTORS are thyristors which can be switched from the on-state to the off-state and vice versa by applying control signals of appropriate polarity to the gate terminal.

Properties
AAE745-005 controllable anode current
AAE746-005 fall time

AAA136-001 02

Reverse blocking thyristors RVB

A set of reverse blocking thyristors of which each thyristor can be described with the same group of data element types.

NOTE
REVERSE BLOCKING THYRISTORS are unidirectional thyristors that switch for positive anode voltages and exhibit a reverse blocking state for negative anode voltages.

Properties
AAE300-005 repetitive peak reverse voltage
AAE734-005 rate of rise on-state current
AAE748-005 cathode-gate to cathode current
AAE749-005 anode-gate to anode current
AAE750-005 cathode-gate trigger voltage
AAE751-005 anode-gate to anode voltage

AAA137-001 02

Triacs TRI

A set of triacs of which each triac can be described with the same group of data element types.

NOTE
TRIACS are bi-directional triode thyristors: three-terminal trigger-devices having substantially the same switching behaviour in the first and third quadrants of behaviour in the first and third quadrants of the principal characteristic. [IEC 60747-6 (2000]

Properties
AAE276-005 reverse current
AAE305-005 Joule-integral
AAE728-005 rms on-state current
AAE729-005 repetitive peak on-state current
AAE730-005 non-rep peak on-state current
AAE732-005 gate trigger current

AAE734-005 rate of rise on-state current
AAE738-005 off-state voltage
AAE739-005 repetitive peak off-state voltage
AAE740-005 rate of rise of off-state voltage
AAE741-005 rate of rise commutating voltage
AAE742-005 gate trigger voltage
AAF135-005 off-state current
AAF136-005 holding current
AAF137-005 latching current

AAA138-001 02

Tubes TUB

A set of tubes of which each tube can be described with the same group of data element types.

NOTE
TUBES are electronic devices in which conduction takes place by electrons or ions between electrodes through a vacuum or gaseous medium within a gas tight envelope, but excluding devices used only for lighting. IEC 60050(531) (1974)

Properties
AAE579-005 heater voltage
AAE580-005 heater current

AAE696-005 tube type

Subclasses
AAA139-001 Display tubes
AAA142-001 Gas filled tubes
AAA143-001 Photo sensitive tubes
AAA144-001 Space charge controlled tubes
AAA145-001 Space charge wave tubes

AAA139-001 02

Display tubes CRT

A set of display tubes of which each tube can be described with the same group of data element types.

NOTE
DISPLAY TUBES are signal-to-image converter tubes in which a well-defined and controllable beam of electrons is produced and directed on to a surface to give a visible or otherwise detectable display or effect. IEC 60050(531) (1974)

Properties
AAE581-005 overall length
AAE588-005 deflection angle
AAE589-005 neck diameter
AAE590-005 anode voltage
AAE592-005 screen diagonal
AAE593-005 useful screen horizontal
AAE594-005 useful screen vertical
AAE595-005 tube size (cm)
AAE596-005 glass transmission
AAE598-005 base type
AAE605-005 phosphor code
AAE606-005 application code
AAE804-005 screen curvature radius
AAF203-005 anode current average
AAF204-005 anode current peak
AAF205-005 vertical resolution
AAF271-005 screen shape
AAF272-005 tube size (inch)
AAF315-005 anode voltage limiting

AAF202-005 chromaticity

Subclasses
AAA140-001 Colour display tubes
AAA141-001 Monochrome display tubes

AAA140-001 02

Colour display tubes COL

A set of colour display tubes of which each tube can be described with the same group of data element types.

NOTE
COLOUR DISPLAY TUBES are display tubes which can produce images in colour by varying the relative intensity of excitation of three screen phosphors of different chromaticity.

Properties
AAE584-005 grid 2 voltage for cut-off
AAE585-005 focusing voltage
AAE591-005 cathode voltage for cut-off
AAE805-005 pixel pitch horizontal
AAE806-005 horizontal resolution
AAF314-005 focusing voltage limiting

AAA141-001 02

Monochrome display tubes MCR

A set of monochrome display tubes of which each tube can be described with the same group of data element types.

NOTE
MONOCHROME DISPLAY TUBES are display tubes which can produce images of only one chromaticity, usually determined by a screen phosphor with a single pair of colour coordinates.

Properties
AAE578-005 grid 1 voltage for cut-off
AAE586-005 focusing voltage
AAE603-005 cathode voltage for cut-off
AAF206-005 grid 2 voltage

AAA142-001 02

Gas filled tubes GAS

A set of gas filled tubes of which each tube can be described with the same group of data element types.

NOTE
GAS FILLED TUBES are electronic tubes in which the electrical characteristics are substantially established by the ionisation of deliberately introduced gas or vapour.

AAA143-001 02

Photo sensitive tubes PHO

A set of photo sensitive tubes of which each tube can be described with the same group of data element types.

NOTE
PHOTO SENSITIVE TUBES are tubes the functioning of which is determined by the photoelectric effect.

AAA144-001 02

Space charge controlled tubes SCC

A set of space charge control tubes of which each tube can be described with the same group of data element types.

NOTE
SPACE CHARGE CONTROLLED TUBES are electronic tubes whose mode of operation is based on the control of space-charge-limited current by electrode voltages.

AAA145-001 02

Space charge wave tubes SCW

A set of space charge wave tubes of which each tube can be described with the same group of data element types.

NOTE
SPACE CHARGE WAVE TUBES are vacuum tubes the functioning of which is based on the conversion of energy by interaction of electromagnetic fields with space-charge waves of an electron beam.

AAA146-001 02

Tuners TUN

A set of tuners of which each tuner can be described with the same group of data element types.

NOTE
TUNERS are packaged units capable of producing only the first portion of the functions of a receiver and delivering either radio-frequency, intermediate-frequency, or demodulated information to some other equipment.

AAA147-002 02

Electromechanical components EM

A set of electromechanical components of which each component can be described with the same group of data element types.

NOTE
ELECTROMECHANICAL COMPONENTS are components utilizing electromagnetic energy of which the operation involves mechanical motion.

Properties
AAE007-005 terminal shape
AAE008-005 terminal placement
AAE023-005 terminal diameter
AAE024-005 terminal pitch
AAE027-005 mounted height
AAE072-005 terminal length
AAE149-005 safety approval
AAE257-005 power dissipation
AAE259-005 shape/size code BSI
AAE347-005 CECC specification
AAE540-005 current rms
AAE633-005 lacquered length
AAE634-005 terminal material
AAE754-005 number of terminals
AAE785-005 signal type
AAE841-005 storage temperature
AAE891-005 ambient temperature
AAE987-005 power consumption
AAF316-001 hole pitch
AAF317-001 flange length
AAF319-001 flange height
AAF320-001 body diameter
AAF321-001 pitch (x-axis)
AAF322-001 pitch (y-axis)
AAF337-001 pitch circle diameter
AAF338-001 terminal breadth
AAF339-001 terminal thickness
AAF340-001 offset (y-axis)
AAF341-001 offset (x-axis)
AAF342-001 flange diameter
AAF343-001 mounting method
AAF344-001 body shape
AAF345-001 terminal exit position SMD
AAF346-001 terminal exit position non-SMD
AAF347-001 terminal shape non-SMD
AAF348-001 terminal shape SMD
AAF351-001 number of holes
AAF352-001 basic aspect
AAF373-001 number of studs
AAF374-001 number of pitches (x-axis)
AAF375-001 number of pitches (y-axis)
AAF376-001 terminal cross-section shape

AAE060-005 category EM component

Subclasses
AAA148-001 Connectors
AAA610-001 Connector parts
AAA149-002 Fuses
AAA150-001 Loudspeakers
AAA159-001 Microphones
AAA160-001 Motors
AAA171-001 Relays
AAA172-001 Switches

AAA148-002 01

Connectors CON

A set of connectors of which each connector can be described with the same group of data element types.

NOTE
CONNECTORS are components which terminate conductors for the purpose of providing connection and disconnection to a suitable mating component.

Properties
AAE155-005 insulation resistance
AAE159-005 creepage distance
AAE345-005 female entry
AAE348-005 pinning arrangement
AAE350-005 contact finish
AAE351-006 housing material
AAE352-005 terminal-to-contact angle
AAE353-005 contact sex
AAE354-005 polarisation
AAE355-005 contact body material
AAE356-005 connector shape
AAE357-005 performance class
AAE358-005 contact current max
AAE359-005 number of contacts
AAE360-005 number of rows
AAE361-005 mechanical endurance
AAE362-005 connector opening
AAE363-005 contact length under housing
AAE920-005 contact resistance
AAF045-005 engaging force
AAF046-005 separating force
AAF051-005 locking device
AAF053-005 terminal length beside housing
AAF124-005 integrated component
AAF125-005 contact spring material
AAF126-005 UL flammability
AAF127-005 IEC flammability
AAF128-005 package colour
AAF148-005 socket type
AAF150-005 number of contacts per row
AAF434-001 bending radius
AAJ037-001 termination style
AAJ038-001 coupling style
AAJ039-001 contact pitch
AAJ042-001 connector rated voltage
AAJ043-001 connector rated current
AAJ044-001 connector diameter

AAE349-006 connector type

Subclasses
AAA518-001 Circular connectors
AAA519-001 Rectangular connectors
AAA520-001 PCB connectors
AAA521-001 RF connectors
AAA522-001 Connectors for IC cards
AAA523-001 Modular connectors
AAA526-001 Plugs and jacks
AAA527-001 Sockets
AAA528-001 Terminals

AAA149-002 01

Fuses FUS

A set of fuses of which each fuse can be described with the same group of data element types.

NOTE
FUSES are devices that, by the fusing of one or more of their specially-designed and proportioned components, open the circuit in which they are inserted by breaking the current when this exceeds a given value for a sufficient time. The fuse comprises all the parts that form the complete device. IEC 60050(441) (1984)

Properties
AAE519-005 nominal voltage
AAE523-005 Joule-integral
AAE524-005 speed
AAE525-005 rated current
AAF122-005 rated breaking capacity
AAF123-005 voltage drop
AAJ034-001 fuse pre-arcing time

AAJ012-002 fuse type

Subclasses
AAA575-001 Current-activated fuses
AAA576-001 Thermally-activated fuses

AAA150-001 02

Loudspeakers LSP

A set of loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
LOUDSPEAKERS are transducers by which acoustic waves are obtained from electric oscillation waves and designed to radiate acoustic power into the surrounding medium.

Properties
AAE338-005 maximum noise voltage
AAE339-005 upper rated frequency
AAE340-005 effective frequency f_e2
AAE341-005 effective frequency f_e1
AAF090-005 dc resistance
AAF193-005 sensitivity

AAE005-006 transducer principle

Subclasses
AAA151-001 Moving conductor loudspeakers
AAA152-001 Magnetodynamic loudspeakers
AAA153-001 Ionic loudspeakers
AAA154-001 Electromagnetic loudspeakers
AAA155-001 Pneumatic loudspeakers
AAA156-001 Piezoelectric loudspeakers
AAA157-001 Electrostatic loudspeakers
AAA158-001 Magnetostrictive loudspeakers

AAA151-001 02

Moving conductor loudspeakers MVC

A set of moving conductor loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
MOVING CONDUCTOR LOUDSPEAKERS are loudspeakers that operate by the motion of a conductor or a coil, carrying a varying current, in a steady magnetic field.

Properties
AAE048-005 maximum noise power
AAE049-005 rated impedance
AAE050-005 resonance frequency
AAE051-005 centre pole diameter
AAE053-005 magnet material
AAE054-005 baffle hole length
AAE055-005 frequency application
AAE056-005 baffle hole breadth
AAE061-005 shape of flange

AAA152-001 02

Magnetodynamic loudspeakers MGD

A set of magnetodynamic loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
MAGNETODYNAMIC LOUDSPEAKERS are loudspeakers that operate by the motion of a magnet attached to a diaphragm and activated by a current through a fixed coil.

AAA153-001 02

Ionic loudspeakers ION

A set of ionic loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
IONIC LOUDSPEAKERS are loudspeakers that operate by the interaction between an ionic plasma and the surrounding air.

AAA154-001 02

Electromagnetic loudspeakers ELM

A set of electromagnetic loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
ELECTROMAGNETIC LOUDSPEAKERS are loudspeakers that operate by the motion of a magnet, connected to the membrane, and actuated by a variable magnetic field.

AAA155-001 02

Pneumatic loudspeakers PNM

A set of pneumatic loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
PNEUMATIC LOUDSPEAKERS are loudspeakers that operate by controlled variations of an air stream.

AAA156-001 02

Piezoelectric loudspeakers PXE

A set of piezoelectric loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
PIEZOELECTRIC LOUDSPEAKERS are loudspeakers that operate by the piezoelectric properties of the material.

AAA157-001 02

Electrostatic loudspeakers ELS

A set of electrostatic loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
ELECTROSTATIC LOUDSPEAKERS are loudspeakers that operate by electrostatic forces.

AAA158-001 02

Magnetostrictive loudspeakers MGS

A set of magnetostriction loudspeakers of which each loudspeaker can be described with the same group of data element types.

NOTE
MAGNETOSTRICTIVE LOUDSPEAKERS are loudspeakers that operate by the magnetostrictive properties of a material.

AAA159-001 02

Microphones MIC

A set of microphones of which each microphone can be described with the same group of data element types.

NOTE
MICROPHONES are electroacoustical transducers by which electric signals are obtained from acoustical oscillations.

Properties
AAE340-005 effective frequency f_e2
AAE341-005 effective frequency f_e1
AAE533-005 input impedance

AAA160-001 02

Motors **MOT**

A set of motors of which each motor can be described with the same group of data element types.

NOTE
MOTORS are (electric) machines which converts electric energy into mechanical energy.

Properties
AAE174-005 magnet type
AAE175-005 coil connection
AAE176-005 armature material
AAE177-005 integrated component
AAE180-005 electromotive force
AAE182-005 input power
AAE517-005 inductance
AAF090-005 dc resistance
AAF131-005 number of phases

AAE179-005 trajectory of motion

Subclasses
AAA161-001 Linear motors
AAA166-001 Rotational motors

AAA161-001 02

Linear motors **LIN**

A set of linear motors of which each motor can be described with the same group of data element types.

NOTE
LINEAR MOTORS are electric motors that have been split and unrolled into two flat sheets, so that the motion between rotor and stator is linear rather than rotary.

Properties
AAF049-005 speed
AAF132-005 travel
AAF133-005 rated force

AAE178-005 supply current type

Subclasses
AAA162-001 Linear ac motors
AAA163-001 Linear dc motors
AAA164-001 Linear stepping motors
AAA165-001 Linear universal motors

AAA162-001 02

Linear ac motors **AC**

A set of linear ac motors of which each motor can be described with the same group of data element types.

NOTE
LINEAR AC MOTORS are linear motors designed essentially for application with an alternating current or voltage.

Properties
AAE184-005 rated input voltage (ac)

AAA163-001 02

Linear dc motors **DC**

A set of linear dc motors of which each motor can be described with the same group of data element types.

NOTES
LINEAR DC MOTORS are linear motors designed essentially for application with a direct current or voltage.

Properties
AAE186-005 rated input voltage (dc)
AAE187-005 mechanical time constant

AAA164-001 02

Linear stepping motors **STP**

A set of linear stepping motors of which each motor can be described with the same group of data element types.

NOTE
LINEAR STEPPING MOTORS are linear motors, the rotor of which rotates in angular increments when the stator windings are energised in a programmed manner.

Properties
AAE203-005 current per phase
AAE204-005 rated input voltage (pulse)
AAE205-005 pull-in rate
AAE206-005 pull-out rate
AAF061-005 step length
AAF062-005 holding force

AAA165-001 02

Linear universal motors **UNI**

A set of linear universal motors of which each motor can be described with the same group of data element types.

NOTE
LINEAR UNIVERSAL MOTORS are linear motors which can be operated by either direct current or single phase alternating current of normal supply frequencies.

AAA166-001 02

Rotational motors ROT

A set of rotational motors of which each motor can be described with the same group of data element types.

NOTE
ROTATIONAL MOTORS are motors characterized by, turning about an axis.

Properties
AAE188-005 direction of rotation
AAE189-005 rotor inertia
AAE190-005 maximum radial force
AAE191-005 rated torque
AAE200-005 maximum axial force

AAE178-005 supply current type

Subclasses
AAA167-001 Rotational ac motors
AAA168-001 Rotational dc motors
AAA169-001 Rotational stepping motors
AAA170-001 Rotational universal motors

AAA167-001 02

Rotational ac motors AC

A set of rotational ac motors of which each motor can be described with the same group of data element types.

NOTE
ROTATIONAL AC MOTORS are rotational motors designed essentially for application with an alternating current or voltage.

Properties
AAE183-005 ac motor synchronism
AAE184-005 rated input voltage (ac)
AAE194-005 synchronous speed
AAE195-005 rated speed
AAE196-005 starting torque

AAA168-001 02

Rotational dc motors DC

A set of rotational dc motors of which each motor can be described with the same group of data element types.

NOTE
ROTATIONAL DC MOTORS are rotational motors designed essentially for application with a direct current or voltage.

Properties
AAE186-005 rated input voltage (dc)
AAE187-005 mechanical time constant
AAE195-005 rated speed
AAE197-005 rated input current
AAE199-005 starting torque

AAA169-001 02

Rotational stepping motors STP

A set of rotational stepping motors of which each motor can be described with the same group of data element types.

NOTE
ROTATIONAL STEPPING MOTORS are rotational motors the rotor of which rotates in angular increments when the stator windings are energised in a programmed manner.

Properties
AAE201-005 pull-out torque
AAE202-005 pull-in torque
AAE204-005 rated input voltage (pulse)
AAE205-005 pull-in rate
AAE206-005 pull-out rate
AAE207-005 holding torque
AAE208-005 step angle

AAA170-001 02

Rotational universal motors UNI

A set of rotational universal motors of which each motor can be described with the same group of data element types.

NOTE
ROTATIONAL UNIVERSAL MOTORS are rotational motors which can be operated by either direct current or single phase alternating current of normal supply frequencies.

AAA171-001 02

Relays REL

A set of relays of which each relay can be described with the same group of data element types.

NOTE
RELAYS are (electric) devices designed to close or open one or more electric circuits by means of separate contacts, after the appearance of certain conditions in the electric input circuits controlling the device. [IEC 60050(446) (1983)]

Properties
AAE155-005 insulation resistance
AAE350-005 contact finish
AAE355-005 contact body material
AAE506-005 switching function
AAE508-005 sealing
AAE509-005 U/I category
AAE512-005 contact voltage (ac)
AAE513-005 limiting contact voltage
AAE515-005 contact current (ac)
AAE907-005 stability
AAE911-005 energising current (dc)
AAE912-005 energising current (ac)
AAE915-005 energising voltage (dc)
AAE916-005 energising voltage (ac)

AAE918-005 coil-contact capacitance
AAE919-005 contact capacitance
AAE920-005 contact resistance
AAE921-005 number of contact assemblies
AAE922-005 mechanical life
AAE923-005 operate time
AAE924-005 release time
AAE925-005 contact member force
AAE928-005 contact power (ac)
AAE930-005 bounce time
AAF048-005 number of primary coils
AAF050-005 release voltage (ac)
AAF090-005 dc resistance
AAF106-005 contact current (dc)
AAF107-005 contact voltage (dc)
AAF125-005 contact spring material
AAF129-005 release voltage (dc)
AAF130-005 contact power (dc)

AAA172-001 02

Switches SWI

A set of switches of which each switch can be described with the same group of data element types.

NOTE
SWITCHES are devices designed to close and open one or more electric circuits by means of separable contacts, under control of an external quantity. (derivation)

Properties
AAE155-005 insulation resistance
AAE208-005 step angle
AAE350-005 contact finish
AAE351-006 housing material
AAE355-005 contact body material
AAE506-005 switching function
AAE512-005 contact voltage (ac)
AAE513-005 limiting contact voltage
AAE515-005 contact current (ac)
AAE920-005 contact resistance
AAE921-005 number of contact assemblies
AAE922-005 mechanical life
AAE928-005 contact power (ac)
AAE929-005 number of stable positions
AAE930-005 bounce time
AAF106-005 contact current (dc)
AAF107-005 contact voltage (dc)
AAF125-005 contact spring material
AAF130-005 contact power (dc)
AAF134-005 integrated function

AAE926-005 actuating quantity

Subclasses
AAA173-001 Reed switches
AAA174-002 Mechanical switches
AAA175-001 Thermostatic switches

AAA173-001 02

Reed switches REE

A set of reed switches of which each switch can be described with the same group of data element types.

NOTE
REED SWITCHES are switches that have contacts mounted on ferromagnetic reeds (thin bars) sealed in a glass tube, designed for activation by an external magnetic field.

AAA174-002 01

Mechanical switches MEC

A set of mechanical switches of which each switch can be described with the same group of data element types.

NOTE
MECHANICAL SWITCHES are switches actuated by an external mechanical force.

Properties
AAE931-006 switch actuation
AAE932-005 actuating force
AAJ064-001 number of poles
AAJ065-001 travel
AAJ066-001 angular travel
AAJ067-001 operating life
AAJ068-001 shaft style
AAJ069-001 shaft length
AAJ070-001 shaft diameter
AAJ071-001 additional features
AAJ072-001 sealing

AAA175-001 02

Thermostatic switches THE

A set of thermostatic switches of which each switch can be described with the same group of data element types.

NOTE
THERMOSTATIC SWITCHES are switches whose function is controlled by variations of temperature and whose contacts make or break automatically a load circuit when the temperature of the ambient space in which their sensing element is placed or the temperature of the surface on which they are fixed reaches a predetermined value. [IEC 60050(581) (1978)]

AAA215-001 02

Magnetic parts MP

A set of magnetic parts of which each part can be described with the same group of data element types.

NOTE
MAGNETIC PARTS are products consisting entirely of the same magnetic material except for possible coating or finishing of the surface.

AAE759-005 coercivity class

Subclasses
AAA216-001 Hard-magnetic parts
AAA217-001 Soft-magnetic parts

AAA216-001 02

Hard-magnetic parts HRD

A set of hard-magnetic parts of which each part can be described with the same group of data element types.

NOTE
HARD-MAGNETIC PARTS are magnetic parts having a high coercivity.

AAA217-001 02

Soft-magnetic parts SFT

A set of soft-magnetic parts of which each part can be described with the same group of data element types.

NOTE
SOFT-MAGNETIC PARTS are magnetic parts having a low coercivity.

Properties
AAE764-005 soft magnetic material grade
AAE765-005 core size code
AAE766-005 core shape
AAE770-005 inductance factor
AAE771-005 effective permeability
AAE775-005 total power loss
AAE776-005 effective magnetic path length
AAE777-005 core factor C_1
AAE778-005 (air) gap length
AAE782-005 effective cross-sectional area
AAF283-005 minimum cross-sectional area
AAF309-005 accessory name

AAA218-001 02

Materials MA

A set of materials of which each material can be described by the same set of data element types.

NOTE
MATERIALS are products intended for further physical processing including chemical and nuclear processing, during which their geometry or composition will change.

Properties
AAF286-005 density

AAF311-006 material type

Subclasses
AAA219-001 Acoustic materials
AAA231-001 Dielectric and insulating materials
AAA220-001 Magnetic materials
AAA223-001 Optical materials
AAA230-001 Printed wiring laminates
AAA224-001 Thermal materials

AAA219-001 02

Acoustic materials ACO

A set of acoustic materials of which each material can be described by the same set of data element types.

NOTE
ACOUSTIC MATERIALS are materials related to, containing, proceeding, arising from, actuated by, or carrying sound.

AAA220-001 02

Magnetic materials MG

A set of magnetic materials of which each material can be described by the same set of data element types.

NOTE
MAGNETIC MATERIALS are materials exhibiting ferromagnetism.

Properties
AAE760-005 resistivity
AAE761-005 Curie temperature

AAE759-005 coercivity class

Subclasses
AAA221-001 Hard magnetic materials
AAA222-001 Soft magnetic materials

AAA221-001 02

Hard magnetic materials HRD

A set of hard magnetic materials of which each material can be described by the same set of data element types.

NOTE
HARD-MAGNETIC MATERIALS are materials exhibiting ferromagnetism having a high coercivity.

Properties
AAE762-005 hard magnetic material grade
AAF287-005 coercivity H_cB
AAF288-005 coercivity H_cJ
AAF289-005 field strength at (BH)_max
AAF290-005 saturation field strength
AAF291-005 temperature coefficient H_cJ
AAF292-005 remanent flux density
AAF293-005 flux density at (BH)_max
AAF294-005 recoil permeability
AAF295-005 BH product max
AAF296-005 B_r x H_cJ product
AAF297-005 temperature coefficient Br

AAA222-001 02

Soft magnetic materials SFT

A set of soft magnetic materials of which each material can be described by the same set of data element types.

NOTE
SOFT-MAGNETIC MATERIALS are materials exhibiting ferromagnetism having a low coercivity.

Properties
AAE764-005 soft magnetic material grade
AAE769-005 magnetic flux density
AAE772-005 initial permeability
AAE773-005 amplitude permeability
AAF298-005 loss factor
AAF299-005 disaccommodation factor
AAF300-005 specific total loss
AAF306-005 hysteresis material constant
AAF307-005 temperature factor of permeability
AAF308-005 saturation flux density

AAA223-001 02

Optical materials OP

A set of optical materials of which each material can be described by the same set of data element types.

NOTE
OPTICAL MATERIALS are materials which are transparent to light or to infra-red, ultra violet or X-ray radiation, such as glass and certain single crystals, polycrystalline.

AAA224-001 02

Thermal materials TH

A set of thermal materials of which each material can be described by the same set of data element types.

NOTE
THERMAL MATERIALS are materials that can be used to convert thermal energy into electric energy or provides refrigeration directly from electric energy.

AAA225-001 02

Deflection units DFL

A set of deflection units of which each deflection unit can be described by the same set of data element types.

NOTE
DEFLECTION UNITS are assemblies of field coils and line coils used to produce the magnetic fields for vertical and horizontal deflection of the electron beam(s) of a display tube.

Properties
AAE607-005 line coil inductance
AAE608-005 field coil inductance
AAE609-005 line coil resistance
AAE610-005 field coil resistance
AAE611-005 line deflection current
AAE612-005 field deflection current
AAF273-005 display format
AAF274-005 line frequency

AAA226-001 02

Chokes CHOKE

A set of chokes of which each choke can be described by the same set of data element types.

NOTE
CHOKES are inductances used in a circuit to present a high impedance for frequencies above a specified frequency range without appreciably limiting the flow of direct current.

AAA227-001 02

Coils COIL

A set of coils of which each coil can be described by the same set of data element types.

NOTE
COILS are a number of turns of wire used to introduce inductance into an electric circuit, to produce magnetic flux, or to react mechanically to a changing magnetic flux.

AAA228-001 02

Linearity control units LINUNIT

A set of linearity control units of which each unit can be described by the same set of data element types.

NOTE
LINEARITY CONTROL UNITS are control units to adjust the variation of scanning speed during the trace interval to minimise geometric distortion.

AAA229-001 02

Microwave components MIC

A set of components for operation at microwave frequencies of which each component can be described by the same set of data element types.

Properties
AAF260-005 characteristic impedance
AAJ041-001 voltage standing wave ratio
AAJ056-001 category temperature
AAJ117-001 microwave component type
AAJ118-001 connection type
AAJ119-001 insertion loss
AAJ120-001 isolation
AAJ121-001 maximum power handling
AAJ122-001 frequency range

AAA230-001 02

Printed wiring laminates PWL

A set of copper-clad laminates for printed wiring of which each laminate can be described by the same set of data element types.

Properties
AAJ040-001 circuit board thickness
AAJ107-001 printed wiring base material
AAJ108-001 copper thickness
AAJ109-001 number of layers

AAA231-001 02

Dielectric and insulating materials DIEL

A set of dielectric or insulating materials of which each material can be described by the same set of data element types.

Properties
AAJ106-001 dielectric material

AAA232-001 02

Printed wiring circuits PWC

A set of rigid, sem-rigid or flexible printed wiring circuits of which each circuit can be described by the same set of data element types.

Properties
AAJ040-001 circuit board thickness
AAJ107-001 printed wiring base material
AAJ108-001 copper thickness
AAJ109-001 number of layers
AAJ110-001 circuit length
AAJ111-001 circuit width
AAJ112-001 track width
AAJ113-001 track spacing
AAJ114-001 connector material
AAJ115-001 connector pitch

AAA233-001 02

Features FEA

A set of features of a characteristic property of which each feature can be described by the same set of data element types.

NOTE
FEATURES are autonomous and stand-alone abstractions of an object of the parts/component library application domain. It might be represented as a specific subclass of other classes.

AAF440-001 features

Subclasses
AAA234-001 Complex number values
AAA235-001 Toleranced values

AAA234-001 02

Complex number values CPLX

A set of properties representing a characteristic value as a complex quantity which can be described by the same set of data element types.

NOTE
COMPLEX NUMBER VALUES are values for physical quantities that may be expressed in a Cartesian form with a real and an imaginary part or in a polar form with a magnitude and an argument (phase angle).

Properties
AAF454-001 phase angle
AAF455-001 phase angle

AAF441-001 complex numbers

Subclasses
AAA236-001 Impedance
AAA237-001 Admittance

AAA235-001 02

Toleranced values TOL

A set of properties representing the percentage (%) tolerances of a characteristic value which can be described by the same set of data element types.

NOTE
TOLERANCED VALUES are values for physical quantities that may be expressed as the nominal value of the quantity together with deviations from that nominal value as percentages or absolute values.

Properties
AAF443-001 symmetric tolerance
AAF444-001 negative tolerance
AAF445-001 positive tolerance

AAF442-001 toleranced values

Subclasses
AAA238-001 Toleranced capacitance
AAA239-001 Toleranced resistance
AAA239-001 Toleranced resistance

AAA236-001 02

Impedance IMP

A set of properties representing the impedance of an electric component as a complex quantity of which each set of values can be described by the same set of data element types

NOTE
IMPEDANCE is the ratio of voltage to current expressed as a complex number value.

Properties
AAF456-001 modulus of impedance
AAF457-001 resistance
AAF458-001 reactance

AAA237-001 02

Admittance ADM

A set of properties representing the admittance of an electric component as a complex quantity of which each set of values can be described by the same set of data element types.

NOTE
ADMITTANCE is the ratio of current to voltage expressed as a complex number value.

Properties
AAF459-001 modulus of admittance
AAF460-001 conductance
AAF461-001 susceptance

AAA238-001 02

Toleranced capacitance TOLCAP

A set of properties representing capacitance of an electric component together with associated tolerances of which each set of values can be described by the same set of data element types.

Properties
AAF446-001 capacitance
AAF447-001 symmetric capacitance tolerance
AAF448-001 negative capacitance tolerance
AAF449-001 positive capacitance tolerance

AAA239-001 02

Toleranced resistance TOLRES

A set of properties representing resistance of an electric component together with associated tolerances of which each set of values can be described by the same set of data element types.

Properties
AAF450-001 resistance
AAF451-001 symmetric resistance tolerance
AAF452-001 negative resistance tolerance
AAF453-001 positive resistance tolerance

AAA295-001 02

Bare die BARE

A set of bare die devices without attachments and with pads on one surface only for which the geometric and physical properties of each device can be described by the same set of data element types.

NOTE
BARE DIE are unpackaged discrete semiconductors or integrated circuits in the form of singulated die or sawn or unsawn wafers with pads on one surface suitable for interconnection to the substrate or package.

Properties
AAD005-001 substrate material
AAD006-001 connection requirement code
AAD007-001 substrate connection
AAD012-001 termination number
AAD013-001 manufacturer pad identifier
AAD014-001 pad geometry name
AAD015-001 pad x position
AAD016-001 pad y position
AAD017-001 pad orientation
AAD018-001 number of bond sites
AAD024-001 pad shape
AAD025-001 pad length
AAD026-001 pad width
AAD027-001 number of polygon vertices
AAD028-001 vertex number
AAD029-001 vertex x-coordinate
AAD030-001 vertex y-coordinate
AAD078-001 passivation material
AAD091-001 connection requirement
AAD093-001 substrate connection
AAD116-001 pad geometry count
AAD119-001 backside finish
AAD120-001 pad metallisation
AAD121-001 pad diameter
AAD148-001 bulk material
AAD149-001 maximum assembly temperature

AAA296-001 02

Bumped die BUMP

A set of bare die devices with bumps for connection to a substrate for which the geometric and physical properties of each device can be described by the same set of data element types.

NOTE
BUMPED DIE are unpackaged die or wafers that have had added bumps for interconnection and/or mechanical attachment. Typically these can be die that have had solder or other metallic bumps added to the metallised pads on the die (also known as flip-chip).

Properties
AAD122-001 bump size
AAD123-001 bumped height
AAD124-001 bump material
AAD126-001 underfill
AAD146-001 bump height
AAD147-001 bump height tolerance

AAA297-001 02

Die with attached lead frame LEAD

A set of bare die devices with lead frame for connection to a substrate for which the geometric and physical properties of each device can be described by the same set of data element types.

NOTE
DIE WITH ATTACHED LEAD FRAME are unpackaged die that have had added lead frames or similar terminations connected to the pads on the die to allow interconnection and/or mechanical attachment.

Properties
AAD125-001 lead-frame material
AAD126-001 underfill

AAA298-001 02

Minimally-packaged die devices MPD

A set of properties for minimally-packaged die devices for which the geometric and physical properties of each device can be described by the same set of data element types.

NOTE
MINIMALLY-PACKAGED DIE DEVICES are die or wafers that have had some exterior packaging medium and interconnection structure added for protection and ease of handling.

Properties
AAD126-001 underfill
AAD150-001 encapsulation material
AAD155-001 MPD delivery form

AAA299-001 01

Two-sided bare die devices DUAL

A set of properties for bare die devices having connections on both surfaces for which the geometric and physical properties of each device can be described by the same set of data element types.

Properties
AAD005-001 substrate material
AAD013-001 manufacturer pad identifier
AAD014-001 pad geometry name
AAD015-001 pad x position
AAD016-001 pad y position
AAD017-001 pad orientation
AAD018-001 number of bond sites
AAD024-001 pad shape
AAD025-001 pad length
AAD026-001 pad width
AAD027-001 number of polygon vertices
AAD028-001 vertex number
AAD029-001 vertex x-coordinate
AAD030-001 vertex y-coordinate
AAD078-001 passivation material
AAD081-001 die surface
AAD116-001 pad geometry count

AAA301-001 01

Geometry GEO

A set of industrial products of which each product can be described with the same group of data element types.

AAG000-001 geometry type

Subclasses
AAA302-001 Die devices
AAA303-001 Package outlines

AAA302-001 02

Die devices DIE

A set of die devices of which each device can be described with the same group of data element types.

NOTE
DIE DEVICES include bare semiconductor die or wafers, with or without connection structures, or minimally-packaged die or wafers.

Properties
AAD001-001 die identifier
AAD002-001 die name
AAD003-001 die version
AAD008-001 die test level code
AAD009-001 die yield
AAD010-001 die description
AAD011-001 wafer size
AAD019-001 signal name
AAD020-001 signal type
AAD021-001 electrical reference
AAD022-001 signal direction
AAD023-001 swap codes
AAD031-001 supply variability
AAD032-001 supply voltage
AAD033-001 pad supply current
AAD049-001 supply name
AAD054-001 supply current
AAD055-001 supply packing code
AAD056-001 supply form code
AAD060-001 test procedure description
AAD070-001 die step dimension x
AAD071-001 die step dimension y
AAD072-001 die thickness
AAD082-001 test name
AAD085-001 die type
AAD086-001 die type description
AAD087-001 supply form
AAD088-001 supply form description
AAD089-001 supply packing
AAD090-001 supply packing description
AAD095-001 die yield code
AAD115-001 geometric units
AAD117-001 size tolerance
AAD118-001 thickness tolerance
AAD127-001 die picture
AAD129-001 die centre x-position
AAD130-001 die centre y-position
AAD131-001 defect rate
AAD132-001 test flow
AAD133-001 temperature specification
AAD134-001 process options
AAD137-001 conformity level
AAD140-001 die manufacturer
AAD141-001 die supplier
AAD142-001 die data source
AAD143-001 packaged part name
AAD144-001 geometric view
AAD145-001 terminal count
AAD151-001 power limit
AAD153-001 test reliability code
AAD154-001 test maturity code
AAD156-001 fiducial name
AAD157-001 fiducial file name
AAD158-001 fiducial width
AAD159-001 fiducial height

AAD160-001 fiducial x position
AAD161-001 fiducial y position
AAD162-001 fiducial orientation

AAD004-001 die type code

Subclasses
AAA295-001 Bare die
AAA299-001 Two-sided bare die devices
AAA296-001 Bumped die
AAA297-001 Die with attached lead frame
AAA298-001 Minimally-packaged die devices

AAA303-001 01

Package outline PAK

A set of component packages of which each package can be described with the same group of data element types.

NOTE
PACKAGE OUTLINE is the geometric description of the physical shape of a packaged component including its dimensions.

Properties
AAG037-001 quantity of terminal positions
AAG038-001 quantity of missing terminals
AAG059-001 actual quantity of termination
AAG066-001 drawing reference code
AAG067-001 source document identification
AAG068-001 source document page
AAG069-001 manufacturer package code
AAG070-001 standard package code
AAG071-001 standards document reference
AAG072-001 termination count sequence
AAG073-001 surface-mount flag

AAG057-001 package style code

Subclasses
AAA304-001 bead
AAA305-001 chip carrier
AAA307-001 cylindrical
AAA308-001 disc
AAA309-001 flange mount
AAA311-001 flat pack
AAA312-001 grid array
AAA313-001 in line
AAA314-001 long-form
AAA318-001 post mount
AAA319-001 rectangular
AAA320-001 small outline

AAA304-001 01

bead-shaped BD

A set of bead package outline styles of which each outline style can be described with the same group of data element types.

NOTE
BEAD-SHAPED is a package style in which the body is spherical or almost spherical.

AAG056-001 terminal position code

Subclasses
AAA322-001 axial
AAA323-001 bottom

AAA305-001 01

chip-carrier CC

A set of chip-carrier package outline styles of which each outline style can be described with the same group of data element types.

NOTE
CHIP-CARRIER is a package style in which the body has a rectangular in shape and has very short connections or connections on the surface.

AAG056-001 terminal position code

Subclasses
AAA324-001 quad

AAA307-001 01

cylindrical CY

A set of cylindrical package outline styles of which each outline style can be described with the same group of data element types.

NOTE
CYLINDRICAL is a package style in which the body is cylindrical with the length no smaller than the diameter.

AAG056-001 terminal position code

Subclasses
AAA325-001 axial
AAA326-001 bottom
AAA327-001 end
AAA328-001 radial
AAA329-001 upper

AAA308-001 01

disc-shaped DB

A set of disc package outline styles of which each outline style can be described with the same group of data element types.

NOTE
DISC-SHAPED is a package style in which the body is cylindrical with the length smaller than the diameter.

AAG056-001 terminal position code

Subclasses
AAA330-001 axial
AAA331-001 bottom

AAA309-001 01

flange-mount FM

A set of flange-mount package outline styles of which each outline style can be described with the same group of data element types.

NOTE
FLANGE-MOUNT is a package style which is intended for mounting by flanges which form part of the package.

AAG056-001 terminal position code

Subclasses
AAA332-001 bottom
AAA333-001 double
AAA334-001 single
AAA335-001 zig-zag

AAA311-001 01

flat-pack FP

A set of flat-pack package outline styles of which each outline style can be described with the same group of data element types.

NOTE
FLAT-PACK is a package style which is intended for mounting and connection by leads extending away from the body in a horizontal plane.

AAG056-001 terminal position code

Subclasses
AAA336-001 double
AAA337-001 quad

AAA312-001 01

grid-array GA

A set of grid-array package outline styles of which each outline style can be described with the same group of data element types.

NOTE
GRID-ARRAY is a package style in which the body has a rectangular shape with leads disposed in regular patterns over one face.

AAG056-001 terminal position code

Subclasses
AAA338-001 bottom
AAA339-001 perpendicular

AAA313-001 01

in-line IP

A set of in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
IN-LINE is a package style in which the leads are disposed in one or more rows.

AAG056-001 terminal position code

Subclasses
AAA340-001 double
AAA341-001 quad
AAA342-001 single
AAA343-001 triple
AAA344-001 zig-zag

AAA314-001 01

long-form LF

A set of long-form package outline styles of which each outline style can be described with the same group of data element types.

NOTE
LONG FORM is a package style in which the length is greater than the cross-ectional dimensions but which cannot be described as either cylindrical or rectangular.

AAG056-001 terminal position code

Subclasses
AAA345-001 axial

AAA318-001 01

post-mount PM

A set of post-mount package outline styles of which each outline style can be described with the same group of data element types.

NOTE
POST-MOUNT is a package style in which the package is mounted and fastened by a post or stud.

AAG056-001 terminal position code

Subclasses
AAA346-001 upper

AAA319-001 01

rectangular **RC**

A set of rectangular package outline styles of which each outline style can be described with the same group of data element types.

NOTE
RECTANGULAR is a package style in which the body approximates to the shape of a rectangular box.

AAG056-001 terminal position code

Subclasses
AAA347-001 axial
AAA348-001 bottom
AAA349-001 end

AAA320-001 01

small-outline **SO**

A set of small package outline styles of which each outline style can be described with the same group of data element types.

NOTE
SMALL-OUTLINE is a package style which is characterised by small dimensions and which is normally intended for surface-mounting by small gull-wing leads.

AAG056-001 terminal position code

Subclasses
AAA350-001 double
AAA351-001 quad
AAA352-001 single

AAA322-001 01

axial leads **A**

A set of bead package outline styles with axial leads of which each outline style can be described with the same group of data element types.

NOTE
AXIAL LEADS extend outwards from the package along one of its axes in opposite directions away from the centre of the package.

AAG058-001 terminal shape code

Subclasses
AAA353-001 wire

AAA323-001 01

bottom leads **B**

A set of bead package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA354-001 wire

AAA324-001 01

quad **Q**

A set of quad chip-carrier package outline styles of which each outline style can be described with the same group of data element types.

NOTE
QUAD leads are disposed around all four sides of a rectangular package.

AAG058-001 terminal shape code

Subclasses
AAA355-001 J-bend
AAA356-001 no lead

AAA325-001 01

axial leads **A**

A set of cylindrical package outline styles with axial leads of which each outline style can be described with the same group of data element types.

NOTE
AXIAL LEADS extend outwards from the package along one of its axes in opposite directions away from the centre of the package.

AAG058-001 terminal shape code

Subclasses
AAA357-001 wire

AAA326-001 01

bottom leads **B**

A set of cylindrical package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA358-001 wire

AAA327-001 01

end connections E

A set of cylindrical package outline styles with end connections of which each outline style can be described with the same group of data element types.

NOTE
END CONNECTIONS are connections formed on or around the ends of a package.

AAG058-001 terminal shape code

Subclasses
AAA359-001 wrap around

AAA328-001 01

radial leads R

A set of cylindrical package outline styles with radial leads of which each outline style can be described with the same group of data element types.

NOTE
RADIAL LEADS extend outwards from a package in a direction perpendicular to one of the principal axes of the package.

AAG058-001 terminal shape code

Subclasses
AAA360-001 solder lug
AAA361-001 wire

AAA329-001 01

upper connections U

A set of cylindrical package outline styles with upper connections of which each outline style can be described with the same group of data element types.

NOTE
UPPER CONNECTIONS are connections which emerge from the face of a package which is opposite to the face seated on the mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA362-001 solder lug
AAA363-001 screw

AAA330-001 01

axial leads A

A set of disc package outline styles with axial leads of which each outline style can be described with the same group of data element types.

NOTE
AXIAL LEADS extend outwards from the package along one of its axes in opposite directions away from the centre of the package.

AAG058-001 terminal shape code

Subclasses
AAA364-001 wire

AAA331-001 01

bottom leads B

A set of disc package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

Properties
AAG058-001 terminal shape code

Subclasses
AAA365-001 wire

AAA332-001 01

bottom leads B

A set of flange-mount package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA366-001 pin

AAA333-001 01

double-row leads **D**

A set of flange-mount package outline styles with a double row of leads of which each outline style can be described with the same group of data element types.

NOTE
DOUBLE-ROW LEADS are leads which are disposed in pairs in two parallel rows.

AAG058-001 terminal shape code

Subclasses
AAA367-001 pin

AAA334-001 01

single-row leads **S**

A set of flange-mount package outline styles with a single row of leads of which each outline style can be described with the same group of data element types.

NOTE
SINGLE-ROW LEADS are leads which are disposed in a single row along one side of a package.

AAG058-001 terminal shape code

Subclasses
AAA368-001 through hole

AAA335-001 01

zig-zag leads **Z**

A set of flange-mount package outline styles with leads in a zig-zag pattern of which each outline style can be described with the same group of data element types.

NOTE
ZIG-ZAG LEADS are leads which are disposed in two parallel rows with each lead in a row opposite the space between two leads in the other row.

AAG058-001 terminal shape code

Subclasses
AAA369-001 through-hole

AAA336-001 01

double-row leads **D**

A set of dual flat-pack package outline styles of which each outline style can be described with the same group of data element types.

NOTE
DOUBLE-ROW LEADS are leads which are disposed in two parallel rows.

AAG058-001 terminal shape code

Subclasses
AAA370-001 flat

AAA337-001 01

quad **Q**

A set of quad flat-pack package outline styles of which each outline style can be described with the same group of data element types.

NOTE
QUAD leads are disposed around all four sides of a rectangular package.

AAG058-001 terminal shape code

Subclasses
AAA371-001 gull wing

AAA338-001 01

bottom leads **B**

A set of grid-array package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA372-001 butt

AAA339-001 01

perpendicular **P**

A set of pin-grid-array package outline styles of which each outline style can be described with the same group of data element types.

NOTE
PERPENDICULAR LEADS are rigid pins which are disposed over the face of a package and perpendicular to it.

AAG058-001 terminal shape code

Subclasses
AAA373-001 pin

AAA340-001 01

double-row leads **D**

A set of dual-in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
DOUBLE-ROW LEADS are leads which are disposed in a two parallel rows.

AAG058-001 terminal shape code

Subclasses
AAA374-001 pin
AAA375-001 through-hole

AAA341-001 01

quad **Q**

A set of quad-in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
QUAD leads are disposed around all four sides of a rectangular package.

AAG058-001 terminal shape code

Subclasses
AAA376-001 through-hole

AAA342-001 01

single-row leads **S**

A set of single-in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
SINGLE-ROW LEADS are leads which are disposed in a single row along one side of a package.

AAG058-001 terminal shape code

Subclasses
AAA377-001 through-hole

AAA343-001 01

triple row **T**

A set of triple-in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
SINGLE-ROW LEADS are leads which are disposed in a single row along one side of a package.

AAG058-001 terminal shape code

Subclasses
AAA378-001 through-hole

AAA344-001 01

zig-zag leads **Z**

A set of zigzag-in-line package outline styles of which each outline style can be described with the same group of data element types.

NOTE
ZIG-ZAG LEADS are leads which are disposed in two parallel rows with each lead in a row opposite the space between two leads in the other row.

AAG058-001 terminal shape code

Subclasses
AAA379-001 through-hole

AAA345-001 01

axial leads **A**

A set of long-form package outline styles with axial leads of which each outline style can be described with the same group of data element types.

NOTE
AXIAL LEADS extend outwards from the package along one of its axes in opposite directions away from the centre of the package.

AAG058-001 terminal shape code

Subclasses
AAA380-001 wire

AAA346-001 01

upper connections **U**

A set of post-mount package outline styles with upper connections of which each outline style can be described with the same group of data element types.

NOTE
UPPER CONNECTIONS are connections which emerge from the face of a package which is opposite to the face seated on the mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA381-001 solder lug
AAA382-001 high current cable

AAA347-001 01

axial leads A

A set of rectangular package outline styles with axial leads of which each outline style can be described with the same group of data element types.

NOTE
AXIAL LEADS extend outwards from the package along one of its axes in opposite directions away from the centre of the package.

AAG058-001 terminal shape code

Subclasses
AAA383-001 solder lug
AAA384-001 wire

AAA348-001 01

bottom leads B

A set of rectangular package outline styles with bottom leads of which each outline style can be described with the same group of data element types.

NOTE
BOTTOM LEADS are leads which emerge from the face of a package which is on or nearest to its mounting plane.

AAG058-001 terminal shape code

Subclasses
AAA385-001 wire

AAA349-001 01

end connections E

A set of rectangular package outline styles with end connections of which each outline style can be described with the same group of data element types.

NOTE
END CONNECTIONS are connections formed on or around the ends of a package.

AAG058-001 terminal shape code

Subclasses
AAA386-001 no lead
AAA387-001 wraparound

AAA350-001 01

double-row leads D

A set of dual small package outline styles of which each outline style can be described with the same group of data element types.

NOTE
DOUBLE-ROW LEADS are leads which are disposed in a two parallel rows

AAG058-001 terminal shape code

Subclasses
AAA388-001 gull-wing

AAA351-001 01

quad Q

A set of quad small package outline styles of which each outline style can be described with the same group of data element types.

NOTE
QUAD leads are disposed around all four sides of a rectangular package.

AAG058-001 terminal shape code

Subclasses
AAA389-001 gull-wing

AAA352-001 01

single-row leads S

A set of single small package outline styles of which each outline style can be described with the same group of data element types.

NOTE
SINGLE-ROW LEADS are leads which are disposed in a single row along one side of a package.

AAG058-001 terminal shape code

Subclasses
AAA390-001 gull-wing

AAA353-001 01

wire W

A set of bead package outline styles with axial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA391-001 straight leads

AAA354-001 01

wire **W**

A set of bead package outline styles with bottom wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA392-001 straight leads
AAA393-001 formed leads

AAA355-001 01

J-bend **J**

A set of quad chip-carrier package outline styles with J-bend leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA394-001 standard form

AAA356-001 01

no-lead **N**

A set of quad leadless chip-carrier package outline styles of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA395-001 standard form

AAA357-001 01

wire **W**

A set of cylindrical package outline styles with axial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA396-001 straight leads

AAA358-001 01

wire **W**

A set of cylindrical package outline styles with bottom wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA397-001 leads on a circle
AAA398-001 straight leads in line
AAA399-001 formed leads in line
AAA400-001 leads on a square grid
AAA401-001 offset leads

AAA359-001 01

wrap-around **R**

A set of cylindrical package outline styles with wrap-around end connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA402-001 standard form

AAA360-001 01

solder lug **D**

A set of cylindrical package outline styles with radial solder-lug leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA403-001 straight leads

AAA361-001 01

wire **W**

A set of cylindrical package outline styles with radial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA404-001 straight leads

AAA362-001 01

solder lug **D**

A set of cylindrical package outline styles with upper solder-lug connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA405-001 standard form

AAA363-001 01

screw **Y**

A set of cylindrical package outline styles with upper screw connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA406-001 standard form

AAA364-001 01

wire **W**

A set of disc package outline styles with axial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA407-001 straight leads

AAA365-001 01

wire **W**

A set of disc package outline styles with bottom wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA408-001 straight leads
AAA409-001 formed leads

AAA366-001 01

pin **P**

A set of flange-mount package outline styles with bottom pins of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA410-001 offset leads
AAA411-001 leads on a circle

AAA367-001 01

pin **P**

A set of flange-mount package outline styles with a double row of pins of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA412-001 round pins

AAA368-001 01

through-hole **T**

A set of flange-mount package outline styles with a single row of through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA413-001 straight flat leads
AAA414-001 straight V-section leads

AAA369-001 01

through-hole **T**

A set of flange-mount package outline styles with through-hole leads in a zig-zag pattern of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA415-001 straight flat leads
AAA416-001 straight V-section leads

AAA370-001 01

flat **F**

A set of dual flat-pack package outline styles with flat leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA417-001 straight flat leads

AAA371-001 01

gull wing **G**

A set of quad flat-pack package outline styles with gull-wing leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA418-001 standard form

AAA372-001 01

butt **B**

A set of grid-array package outline styles with bottom butt leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA419-001 solder balls

AAA373-001 01

pin **P**

A set of pin-grid-array package outline styles with pin leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA420-001 round pins

AAA374-001 01

pin **P**

A set of dual-in-line package outline styles with pin leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA421-001 round pins
AAA422-001 rectangular pins

AAA375-001 01

through-hole **T**

A set of dual-in-line package outline styles with through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA423-001 standard form

AAA376-001 01

through-hole **T**

A set of quad-in-line package outline styles with through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA424-001 standard form

AAA377-001 01

through-hole **T**

A set of single-in-line package outline styles with through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA425-001 standard form

AAA378-001 01

through-hole **T**

A set of triple-in-line package outline styles with through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA426-001 standard form

AAA379-001 01

through-hole **T**

A set of zigzag-in-line package outline styles with through-hole leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA427-001 standard form

AAA380-001 01

wire **W**

A set of long-form package outline styles with axial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA428-001 straight leads

AAA381-001 01

solder lug **D**

A set of post-mount package outline styles with upper solder-lug connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA429-001 one fixed tag
AAA430-001 two fixed tags

AAA382-001 01

high current cable **H**

A set of post-mount package outline styles with upper high-current cable connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA431-001 one lead with tag
AAA432-001 two leads with tags
AAA433-001 three leads with tag
AAA434-001 one lead no tag

AAA383-001 01

solder lug **D**

A set of rectangular package outline styles with axial solder lugs of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA435-001 strip leads

AAA384-001 01

wire **W**

A set of rectangular package outline styles with axial wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA436-001 off-set leads

AAA385-001 01

wire **W**

A set of rectangular package outline styles with bottom wire leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA437-001 straight leads
AAA438-001 formed leads

AAA386-001 01

no lead **N**

A set of leadless rectangular package outline styles with end connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA439-001 standard form

AAA387-001 01

wrap-around **R**

A set of rectangular package outline styles with wrap-around end connections of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA440-001 standard form

AAA388-001 01

gull-wing **G**

A set of dual small package outline styles with gull-wing leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA441-001 multiple leads
AAA442-001 three leads

AAA389-001 01

gull-wing G

A set of quad small package outline styles with gull-wing leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA443-001 standard form

AAA390-001 01

gull-wing G

A set of single small package outline styles with gull-wing leads of which each outline style can be described with the same group of data element types.

AAG054-001 terminal variant code

Subclasses
AAA444-001 two leads, stub and tab

AAA391-001 01

straight leads T001

A set of bead package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG089-001 package length
AAG090-001 overall length
AAG091-001 bent terminal spacing
AAG111-001 terminal length

DAA001-001 Bead package, straight axial wire leads

AAA392-001 01

straight leads T001

A set of bead package outline styles with straight bottom wire leads of which each outline style can be described with the same group of data element types

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA002-001 Bead package, straight bottom wire leads

AAA393-001 01

formed leads T002

A set of bead package outline styles with formed bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA003-001 Bead package, formed bottom wire leads

AAA394-001 01

standard form T000

A set of quad chip-carrier package outline styles with standard J-bend leads of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA445-001 non-bumped package

AAA395-001 01

standard form T000

A set of quad leadless chip-carrier package outline styles with standard leads of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA446-001 Non-cavity package (moulded)
AAA447-001 cavity package (ceramic)

AAA396-001 01

straight leads T001

A set of cylindrical package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA448-001 plain cylindrical
AAA449-001 top hat package

AAA397-001 01

leads on a circle T003

A set of cylindrical package outline styles with bottom wire leads on a circle of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG004-001 terminal circle diameter
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG026-001 index height
AAG027-001 index width
AAG028-001 index length
AAG029-001 terminal length
AAG047-001 index datum angle
AAG049-001 angular terminal spacing
AAG062-001 package diameter

DAA004-001 Cylindrical package, bottom leads on circle

AAA398-001 01

straight leads in line T004

A set of cylindrical package outline styles with straight in-line bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG009-001 terminal diameter
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG016-001 package width
AAG017-001 terminal spacing
AAG027-001 index width
AAG044-001 terminal reference position
AAG129-001 terminal length

DAA005-001 Cylindrical package, straight in-line bottom leads

AAA399-001 01

formed leads in line T005

A set of cylindrical package outline styles with formed in-line bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG008-001 terminal width
AAG009-001 terminal diameter
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG016-001 package width
AAG017-001 terminal spacing
AAG027-001 index width
AAG044-001 terminal reference position
AAG129-001 terminal length

DAA006-001 Cylindrical package, formed in-line bottom leads

AAA400-001 01

leads on a square grid T006

A set of cylindrical package outline styles with bottom wire leads on a square grid of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG018-001 flange zone height
AAG027-001 index width
AAG028-001 index length
AAG053-001 terminal row spacing
AAG062-001 package diameter
AAG080-001 terminal row spacing
AAG129-001 terminal length

DAA007-001 Cylindrical package, bottom leads on square grid

AAA401-001 01

offset leads T007

A set of cylindrical package outline styles with offset bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG044-001 terminal reference position
AAG129-001 terminal length

DAA008-001 Cylindrical package, offset in-line bottom leads

AAA402-001 01

standard form T000

A set of cylindrical package outline styles with wrap-around end connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG077-001 terminal length
AAG090-001 overall length
AAG104-001 drawing sequence code

DAA009-001 Cylindrical package, wrap-around terminations

AAA403-001 01

straight leads T001

A set of cylindrical package outline styles with straight radial solder-lug leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG089-001 package length
AAG129-001 terminal length

DAA010-001 Cylindrical package, radial tag leads

AAA404-001 01

straight leads T001

A set of cylindrical package outline styles with straight radial wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG089-001 package length
AAG129-001 terminal length

DAA011-001 Cylindrical package, radial wire leads

AAA405-001 01

standard form T000

A set of cylindrical package outline styles with upper solder-lug connections in standard form of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA450-001 clamp mount package
AAA451-001 stud mount package

AAA406-001 01

standard form T000

A set of cylindrical package outline styles with upper screw connections in standard form of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA452-001 clamp mount package
AAA453-001 stud mount package

AAA407-001 01

straight leads T001

A set of disc package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG089-001 package length
AAG090-001 overall length
AAG091-001 bent terminal spacing
AAG111-001 terminal length

DAA012-001 Disc package, straight axial wire leads

AAA408-001 01

straight leads T001

A set of disc package outline styles with straight bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA013-001 Disc package, straight bottom leads

AAA409-001 01

formed leads T002

A set of disc package outline styles with formed bottom wire leads of which each outline style can be described with the same group of data element types

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA014-001 Disc package, formed bottom leads

AAA410-001 01

offset leads T007

A set of flange-mount package outline styles with offset bottom pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG018-001 flange zone height
AAG029-001 terminal length
AAG039-001 mounting hole diameter
AAG042-001 mounting hole separation
AAG045-001 terminal reference position
AAG083-001 larger flange radius
AAG084-001 smaller flange radius
AAG085-001 flange overall length
AAG086-001 flange overall width
AAG108-001 terminal reference position

DAA015-001 Oval flange-mount package, offset bottom leads

AAA411-001 01

leads on a circle T003

A set of flange-mount package outline styles with bottom pins on a circle of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG004-001 terminal circle diameter
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG018-001 flange zone height
AAG029-001 terminal length
AAG039-001 mounting hole diameter
AAG042-001 mounting hole separation
AAG047-001 index datum angle
AAG049-001 angular terminal spacing
AAG083-001 larger flange radius
AAG084-001 smaller flange radius
AAG085-001 flange overall length
AAG086-001 flange overall width

DAA016-001 Oval flange-mount package, bottom leads on circle

AAA412-001 01

round pins T009

A set of flange-mount package outline styles with a double row of round pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG019-001 flange height
AAG027-001 index width
AAG029-001 terminal length
AAG039-001 mounting hole diameter
AAG040-001 terminal emergence height
AAG042-001 mounting hole separation
AAG043-001 curve radius
AAG046-001 package overhang
AAG053-001 terminal row spacing
AAG081-001 lid length

DAA017-001 Flange-mount package, dual-in-line leads

AAA413-001 01

straight flat leads T011

A set of flange-mount package outline styles with a single row of straight, flat, through-hole leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG005-001 stand-off major dimension
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG018-001 flange zone height
AAG031-001 terminal length
AAG039-001 mounting hole diameter
AAG040-001 terminal emergence height
AAG042-001 mounting hole separation
AAG063-001 flange length
AAG111-001 terminal length

DAA018-001 Flange-mount package, single row, straight flat leads

AAA414-001 01

straight V-section leads T023

A set of flange-mount package outline styles with a single row of straight, V-section, through-hole leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG005-001 stand-off major dimension
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG018-001 flange zone height
AAG031-001 terminal length
AAG039-001 mounting hole diameter
AAG040-001 terminal emergence height
AAG042-001 mounting hole separation
AAG063-001 flange length
AAG111-001 terminal length

DAA019-001 Flange-mount package, single row, straight V-section leads

AAA415-001 01

straight flat leads T011

A set of flange-mount package outline styles with straight, flat, through-hole leads in a zig-zag pattern of which each outline style can be described with the same group of data element types.

AAA416-001 01

straight V-section leads T023

A set of flange-mount package outline styles with straight, V-section, through-hole leads in a zig-zag pattern of which each outline style can be described with the same group of data element types.

AAA417-001 01

straight flat leads T011

A set of dual flat-pack package outline styles with straight, flat leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG021-001 package width zone
AAG024-001 overall width
AAG034-001 terminal length
AAG040-001 terminal emergence height
AAG046-001 package overhang

DAA020-001 Dual flat pack

AAA418-001 01

standard form T000

A set of quad flat-pack package outline styles with gull-wing leads in standard form of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA454-001 non-bumped package

AAA419-001 01

solder ball T012

A set of grid-array package outline styles with bottom solder balls of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG053-001 terminal row spacing
AAG080-001 terminal row spacing
AAG107-001 terminal pattern
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG112-001 terminal reference position
AAG113-001 terminal reference position

DAA021-001 Ball-grid array package

AAA420-001 01

round pin T009

A set of pin-grid-array package outline styles with round pins of which each outline style can be described with the same group of data element types.

AAG055-001 body variant code

Subclasses
AAA455-001 cavity up
AAA456-001 cavity down

AAA421-001 01

round pin T009

A set of dual-in-line package outline styles with rectangular pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG029-001 terminal length
AAG044-001 terminal reference position
AAG046-001 package overhang
AAG053-001 terminal row spacing

DAA022-001 Dual-in-line package, rectangular pins

AAA422-001 01

rectangular pin T010

A set of dual-in-line package outline styles with round pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG029-001 terminal length
AAG044-001 terminal reference position
AAG046-001 package overhang
AAG053-001 terminal row spacing

DAA023-001 Dual-in-line package, round pins

AAA423-001 01

standard form T000

A set of dual-in-line package outline styles with through-hole leads in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG005-001 stand-off major dimension
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG029-001 terminal length
AAG036-001 mounted width
AAG046-001 package overhang
AAG051-001 angular terminal spread
AAG087-001 terminal row spacing
AAG088-001 terminal row splay

DAA024-001 Dual-in-line package, standard through-hole leads

AAA424-001 01

standard form T000

A set of quad-in-line package outline styles with through-hole leads in standard form of which each outline style can be described with the same group of data element types.

AAA425-001 01

standard form T000

A set of single-in-line package outline styles with through-hole leads in standard form of which each outline style can be described with the same group of data element types.

AAA426-001 01

standard form T000

A set of triple-in-line package outline styles with through-hole leads in standard form of which each outline style can be described with the same group of data element types

AAA427-001 01

standard form T000

A set of zigzag-in-line package outline styles with through-hole leads in standard form of which each outline style can be described with the same group of data element types.

AAA428-001 01

straight leads T001

A set of long-form package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

AAA429-002 01

one fixed tag **T013**

A set of post-mount package outline styles with one upper solder-lug connection of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG092-001 package height zone
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG116-001 package diameter
AAG118-001 tag hole diameter
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA025-002 Stud-mount package, one fixed tag

AAA430-002 01

two fixed tags **T014**

A set of post-mount package outline styles with two upper solder-lug connections of which each outline style can be described with the same group of data element types.

Properties
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG092-001 package height zone
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG119-001 tag hole diameter
AAG120-001 tag hole diameter
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA026-002 Stud-mount package, two fixed tags

AAA431-002 01

one lead with tag **T015**

A set of post-mount package outline styles with one upper high-current cable connection with tag of which each outline style can be described with the same group of data element types.

Properties
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG118-001 tag hole diameter
AAG121-001 tag hole distance
AAG124-001 height zone
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA027-002 Stud-mount package, one flexible lead with tag

AAA432-002 01

two leads with tags **T016**

A set of post-mount package outline styles with two upper high-current cable connections with tags of which each outline style can be described with the same group of data element types.

Properties
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG119-001 tag hole diameter
AAG120-001 tag hole diameter
AAG122-001 tag hole distance
AAG123-001 tag hole distance
AAG124-001 height zone
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA028-002 Stud-mount package, two flexible leads with tags

AAA433-002 01

three leads with tag **T017**

A set of post-mount package outline styles with three upper high-current cable connections with tags of which each outline style can be described with the same group of data element types.

Properties
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG119-001 tag hole diameter
AAG120-001 tag hole diameter
AAG122-001 tag hole distance
AAG123-001 tag hole distance
AAG124-001 height zone
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA029-002 Stud-mount package, three flexible leads with tags

AAA434-002 01

one lead no tag **T018**

A set of post-mount package outline styles with one upper high-current cable connection without tag of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG116-001 package diameter
AAG124-001 height zone
AAG125-001 overall height
AAG131-001 hexagon width
AAG133-001 non-threaded stud length

DAA030-002 Stud-mount package, one flexible lead, no tag

AAA435-001 01

strip leads **T019**

A set of rectangular package outline styles with axial strip leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG111-001 terminal length

DAA031-001 Rectangular package, axial strip leads

AAA436-001 01

off-set leads **T007**

A set of rectangular package outline styles with axial offset solder lugs of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG044-001 terminal reference position
AAG090-001 overall length
AAG091-001 bent terminal spacing
AAG111-001 terminal length

DAA032-001 Rectangular package, offset axial wire leads

AAA437-001 01

straight leads **T001**

A set of rectangular package outline styles with straight bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA033-001 Rectangular package, straight bottom leads

AAA438-001 01

formed leads **T002**

A set of rectangular package outline styles with formed bottom wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG129-001 terminal length

DAA034-001 Rectangular package, formed bottom leads

AAA439-001 01

standard form **T000**

A set of leadless rectangular package outline styles in standard form with end connections of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG013-001 package length
AAG016-001 package width
AAG031-001 terminal length
AAG032-001 terminal length

DAA035-001 Rectangular package, metallised ends

AAA440-001 01

standard form T000

A set of rectangular package outline styles with wrap-around end connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG016-001 package width
AAG040-001 terminal emergence height
AAG052-001 terminal seating angle
AAG076-001 terminal width
AAG077-001 terminal length
AAG090-001 overall length
AAG104-001 drawing sequence code
AAG105-001 bent terminal spacing

DAA036-001 Rectangular package, wrap-around terminations

AAA441-001 01

multiple leads T020

A set of dual small package outline styles with multiple gull-wing leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG024-001 overall width
AAG034-001 terminal length
AAG046-001 package overhang
AAG052-001 terminal seating angle
AAG076-001 terminal width
AAG077-001 terminal length

DAA037-001 Dual small-outline package, multiple gull-wing leads

AAA442-001 01

three leads T021

A set of dual small package outline styles with three gull-wing leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG024-001 overall width
AAG034-001 terminal length
AAG046-001 package overhang
AAG052-001 terminal seating angle
AAG076-001 terminal width
AAG077-001 terminal length

DAA038-001 Small-outline package, three gull-wing leads

AAA443-001 01

standard form T000

A set of quad small package outline styles with gull-wing leads in standard form of which each outline style can be described with the same group of data element types.

AAA444-001 01

two leads, stub and tab T022

A set of single small package outline styles with two gull-wing leads, a stub and a tab of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG019-001 flange height
AAG031-001 terminal length
AAG034-001 terminal length
AAG040-001 terminal emergence height
AAG063-001 flange length
AAG076-001 terminal width
AAG077-001 terminal length
AAG114-001 flange width

DAA039-001 Small-outline package, two gull-wing leads, stub and tab

AAA445-001 01

non-bumped package B002

A set of quad non-bumped chip-carrier package outline styles with standard J-bend leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG023-001 overall length
AAG024-001 overall width
AAG028-001 index length

AAG053-001 terminal row spacing
AAG076-001 terminal width
AAG077-001 terminal length
AAG079-001 other index length
AAG080-001 terminal row spacing
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG130-001 index angle

DAA040-001 Quad chip carrier, J-bend leads, non-bumped package

AAA446-001 01

Non-cavity package (moulded) B009

A set of quad leadless chip-carrier non-cavity package outline styles with standard leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG028-001 index length
AAG053-001 terminal row spacing
AAG076-001 terminal width
AAG077-001 terminal length
AAG078-001 lid height
AAG080-001 terminal row spacing
AAG081-001 lid length
AAG082-001 lid width
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG112-001 terminal reference position
AAG113-001 terminal reference position
AAG115-001 index terminal length

DAA041-001 Quad chip carrier, leadless non-cavity package (moulded)

AAA447-001 01

cavity package (ceramic) B010

A set of quad leadless chip-carrier cavity package outline styles with standard leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG028-001 index length
AAG053-001 terminal row spacing
AAG076-001 terminal width
AAG077-001 terminal length
AAG078-001 lid height
AAG079-001 other index length
AAG080-001 terminal row spacing
AAG081-001 lid length
AAG082-001 lid width
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG112-001 terminal reference position
AAG113-001 terminal reference position
AAG115-001 index terminal length

DAA042-001 Quad chip carrier, leadless cavity package (ceramic)

AAA448-001 01

plain cylindrical B003

A set of plain cylindrical package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG089-001 package length
AAG090-001 overall length
AAG091-001 bent terminal spacing
AAG111-001 terminal length

DAA043-001 Cylindrical package, straight axial wire leads

AAA449-001 01

top hat package B004

A set of top-hat cylindrical package outline styles with straight axial wire leads of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG009-001 terminal diameter
AAG014-001 package diameter
AAG018-001 flange zone height
AAG062-001 package diameter
AAG091-001 bent terminal spacing
AAG098-001 main terminal length
AAG099-001 secondary terminal length
AAG100-001 main overall length
AAG101-001 secondary overall length
AAG102-001 slug diameter
AAG103-001 slug width

DAA044-001 Top-hat package, straight axial wire leads

AAA450-001 01

clamp mount package B005

A set of cylindrical clamp-mount package outline styles with upper solder-lug connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG111-001 terminal length
AAG117-001 tag hole width

DAA045-001 Cylindrical package, top tag terminals, clamp mount

AAA451-002 01

stud mount package B006

A set of cylindrical stud-mount package outline styles with upper solder-lug connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG092-001 package height zone
AAG093-002 stud thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG111-001 terminal length
AAG117-001 tag hole width
AAG133-001 non-threaded stud length

DAA046-002 Cylindrical package, top tag terminals, stud mount

AAA452-001 01

clamp mount package B005

A set of cylindrical clamp-mount package outline styles with upper screw connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG092-001 package height zone
AAG094-002 terminal thread diameter
AAG097-001 terminal thread

DAA047-002 Cylindrical package, top screw terminals, clamp mount

AAA453-002 01

stud mount package B006

A set of cylindrical stud-mount package outline styles with upper screw connections in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG008-001 terminal width
AAG012-001 terminal thickness
AAG014-001 package diameter
AAG017-001 terminal spacing
AAG092-001 package height zone
AAG093-002 stud thread diameter
AAG094-002 terminal thread diameter
AAG095-001 stud length
AAG096-001 stud thread
AAG097-001 terminal thread
AAG133-001 non-threaded stud length

DAA048-002 Cylindrical package, top screw terminals, stud mount

AAA454-001 01

non-bumped package B002

A set of quad flat-pack non-bumped package outline styles with gull-wing leads in standard form of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG012-001 terminal thickness
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG023-001 overall length
AAG024-001 overall width
AAG052-001 terminal seating angle
AAG053-001 terminal row spacing
AAG076-001 terminal width
AAG077-001 terminal length
AAG080-001 terminal row spacing
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions

DAA049-001 Quad flat pack, gull-wing leads, non-bumped package

AAA455-001 01

cavity up B007

A set of pin-grid-array cavity-up package outline styles with round pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing

AAG078-001 lid height
AAG081-001 lid length
AAG082-001 lid width
AAG107-001 terminal pattern
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG112-001 terminal reference position
AAG113-001 terminal reference position

DAA050-001 Pin-grid array package, cavity up

AAA456-001 01

cavity down B008

A set of pin-grid-array cavity-down package outline styles with round pins of which each outline style can be described with the same group of data element types.

Properties
AAG001-001 seated height
AAG002-001 stand-off height
AAG003-001 package height
AAG009-001 terminal diameter
AAG013-001 package length
AAG016-001 package width
AAG017-001 terminal spacing
AAG078-001 lid height
AAG081-001 lid length
AAG082-001 lid width
AAG107-001 terminal pattern
AAG109-001 quantity of terminal positions
AAG110-001 quantity of terminal positions
AAG112-001 terminal reference position
AAG113-001 terminal reference position

DAA051-001 Pin-grid array package, cavity down

AAA501-001 01

Solid tantalum electrolytics STAN

A set of fixed electrolytic capacitors in which the oxide film formed on the surface of foil, wire or sintered slug of tantalum by anodic oxidation is employed as the dielectric, and solid electrolyte in close contact with this dielectric is employed as a part of the cathode and for which each capacitor is described by the same set of data element types.

AAA502-001 01

Non-solid tantalum electrolytics NTAN

A set of fixed electrolytic capacitors in which the oxide formed on the surface of tantalum by anodic oxidation is employed as the dielectric and paper or fibre impregnated with liquid electrolyte and located in close contact with this dielectric is employed as a part of cathode and for which each capacitor is described by the same set of data element types.

AAA503-001 01

Solid aluminium electrolytics SAL

A set of fixed electrolytic capacitors in which the oxide film formed on the surface of foil, wire or sintered slug of aluminium by anodic oxidation is employed as the dielectric, and solid electrolyte in close contact with this dielectric is employed as a part of cathode and for which each capacitor is described by the same set of data element types.

Properties
AAJ007-001 built-in fuse

AAA504-001 01

Non-solid aluminium electrolytics NAL

A set of fixed electrolytic capacitors in which the oxide formed on the surface of aluminium foil by anodic oxidation is employed as the dielectric and paper or fibre impregnated with liquid electrolyte and located in close contact with this dielectric is employed as a part of the cathode and for which each capacitor is described by the same set of data element types.

AAA505-001 01

Fixed mixed-dielectric capacitors MIX

A set of fixed capacitors in which the dielectric is formed from layers of two or more different materials and for which each capacitor is described by the same set of data element types.

AAA509-001 01

Fixed precision resistors PREC

A set of fixed resistors having stable characteristics for which each resistor is described by the same set of data element types.

AAA510-001 01

Fixed power resistors PWR

A set of fixed resistors intended for high-power applications for which each resistor is described by the same set of data element types.

Properties
AAJ009-001 structure

AAA511-001 01

Fixed low-power resistors LP

A set of fixed resistors intended for low-power applications for which each resistor is described by the same set of data element types.

AAA512-001 01

Fixed chip resistors **CHIP**

A set of fixed resistors intended for surface-mount applications for which each resistor is described by the same set of data element types.

AAA513-001 01

Fixed thermostat resistors **THERM**

A set of fixed resistors for use in thermostats for which each resistor is described by the same set of data element types.

Properties
AAJ013-001 tolerance of TC of resistance

AAA514-001 01

Fixed fusing resistors **FUS**

A set of fixed fusing resistors for which each resistor is described by the same set of data element types.

Properties
AAJ011-001 fusing power

AAA516-002 01

Preset potentiometers **PRESET**

A set of potentiometers which are intended to provide a fixed resistance ratio once the slider position has been set for which each potentiometer is described by the same set of data element types.

NOTE
PRESET POTENTIOMETERS are potentiomers which can be mechanically adjusted with a tool but which are not intended for adjustment during normal operation.

Properties
AAE173-005 total mechanical rotation
AAJ015-001 rotation torque
AAJ017-001 adjustment direction
AAJ018-001 sealing class
AAJ123-001 potentiometer type
AAJ124-001 number of turns

AAA517-001 01

Linear slide potentiometers **SLIDE**

A set of potentiometers in which adjustment is performed by the linear movement of a slider and for which each potentiometer is described by the same set of data element types.

NOTE
LINEAR SLIDE POTENTIOMETERS are potentiometers which can be mechanically adjusted by moving the adjuster along a linear path.

Properties
AAJ019-001 slide length
AAJ020-001 slide force
AAJ021-001 lever stop force

AAA518-001 01

Circular connectors **CIRC**

A set of connectors with circular shell or housing for which each connector is described by the same set of data element types.

AAA519-001 01

Rectangular connectors **RECT**

A set of connectors with contacts in a rectangular or near-rectangular array for which each connector is described by the same set of data element types.

AAA520-001 01

PCB connectors **PCB**

A set of connectors intended for use with printed-circuit boards for which each connector is described by the same set of data element types.

Properties
AAJ022-001 PCB connector type
AAJ040-001 circuit board thickness

AAA521-001 01

RF connectors **RF**

A set of connectors intended for use at radio frequencies for which each connector is described by the same set of data element types.

Properties
AAE487-005 frequency band
AAF260-005 characteristic impedance
AAJ041-001 voltage standing wave ratio

AAA522-001 01

Connectors for IC cards **IC**

A set of connectors intended for use with IC cards for which each connector is described by the same set of data element types.

Properties
AAJ040-001 circuit board thickness

AAA523-001 01

Modular connectors **MOD**

A set of modular connectors for which each connector is described by the same set of data element types.

AAA524-001 01

Connector contacts CONTACT

A set of connector contacts of which each contact can be described with the same group of data element types.

NOTE
CONNECTOR CONTACTS are the conducting parts within a connector which mate individually to form the electrical connection.

Properties
AAE350-005 contact finish
AAE353-005 contact sex
AAE358-005 contact current max
AAJ023-001 contact type

AAA525-001 01

Connector accessories ACCY

A set of accessories for connectors of which each accessory can be described with the same group of data element types.

NOTE
CONNECTOR ACCESSORIES are components which may be used with connectors to facilitate their use in a wide range of applications. Accessories perform no electrical function and include such items as caps, covers, gaskets washers and boots.

Properties
AAF465-001 accessory type

AAA526-001 01

Plugs and jacks JACK

A set of plug or jack connectors for which each connector is described by the same set of data element types.

AAJ024-001 plug/jack type

Subclasses
AAA536-001 Concentric plugs and jacks
AAA540-001 Pin plugs and jacks
AAA545-001 Plugs and jacks for dc power
AAA549-001 Plug assemblies
AAA550-001 Complex jack boards

AAA527-001 01

Sockets SOCK

A set of sockets for mounting and connecting to electric/electronic components for which each socket is described by the same set of data element types.

AAJ028-001 socket type

Subclasses
AAA551-001 Sockets for tubes
AAA554-001 Transistor sockets
AAA555-001 Sockets for integrated circuits
AAA556-001 Sockets for PCB
AAA557-001 Power sockets
AAA561-001 Signal sockets
AAA562-001 Sockets for quartz crystals
AAA563-001 Lighting sockets
AAA564-001 Fuse holders and sockets
AAA565-001 Sockets for antenna feeders

AAA528-001 01

Terminals TERM

A set of terminals for which each terminal is described by the same set of data element types.

AAJ031-001 terminal type

Subclasses
AAA566-001 Small terminals
AAA569-001 Terminal arrays
AAA572-001 Terminal boards
AAA573-001 Terminal rods

AAA536-001 01

Concentric plugs and jacks CONC

A set of concentric plugs and jacks for which each connector is described by the same set of data element types.

AAJ025-001 concentric plug/jack type

Subclasses
AAA537-001 Concentric plugs
AAA538-001 Concentric jacks
AAA539-001 Concentric multiple jacks

AAA537-001 01

Concentric plugs PLUG

A set of concentric plugs for which each plug is described by the same set of data element types.

AAA538-001 01

Concentric jacks JACK

A set of concentric jacks for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA539-001 01

Multiple concentric jacks **MULT**

A set of multiple concentric jacks for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA540-001 01

Pin plugs and jacks **PIN**

A set of pin plugs and jacks for which each connector is described by the same set of data element types.

AAJ026-001 pin plug/jack type

Subclasses
AAA541-001 Pin plugs
AAA542-001 Pin jacks
AAA543-001 Pin multiple jacks
AAA544-001 Shielded pin jacks

AAA541-001 01

Pin plugs **PLUG**

A set of pin plugs for which each plug is described by the same set of data element types.

AAA542-001 01

Pin jacks **JACK**

A set of pin jacks for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA543-001 01

Multiple pin jacks **MULT**

A set of shielded pin jacks for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA544-001 01

Shielded pin jacks **SHLD**

A set of multiple pin jacks for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA545-001 01

Plugs and jacks for dc power **PWR**

A set of plugs and jacks for use in dc power applications for which each connector is described by the same set of data element types.

AAJ027-001 dc power plug/jack type

Subclasses
AAA546-001 DC power plugs
AAA547-001 DC power jacks
AAA548-001 Car plugs

AAA546-001 01

DC power plugs **PLUG**

A set of plugs for use in dc power applications for which each plug is described by the same set of data element types.

AAA547-001 01

DC power jacks **JACK**

A set of jacks for use in dc power applications for which each jack is described by the same set of data element types.

Properties
AAJ045-001 direction of insertion

AAA548-001 01

Car plugs **CAR**

A set of plugs for use in dc power applications in automobiles for which each plug is described by the same set of data element types.

AAA549-001 01

Plug assemblies **ASSY**

A set of plug assemblies for which each assembly is described by the same set of data element types.

AAA550-001 01

Complex jack boards **CMPLX**

A set of complex jack boards for which each jack board is described by the same set of data element types.

AAA551-001 01

Sockets for tubes **TUBE**

A set of sockets for mounting and connecting to vacuum tubes for which each socket is described by the same set of data element types.

Properties
AAJ029-001 tube socket type

AAA554-001 01

Transistor sockets **TRA**

A set of sockets for mounting and connecting to transistors for which each socket is described by the same set of data element types.

AAA555-001 01

Sockets for integrated circuits **IC**

A set of sockets for mounting and connecting to integrated circuits for which each socket is described by the same set of data element types.

Properties
AAJ046-001 package type

AAA556-001 01

Sockets for PCB **PCB**

A set of sockets for mounting and connecting to PC boards for which each socket is described by the same set of data element types.

AAA557-001 01

Power sockets **PWR**

A set of connectors for which each connector is described by the same set of data element types.

Properties
AAE512-005 contact voltage (ac)
AAE515-005 contact current (ac)
AAF106-005 contact current (dc)
AAF107-005 contact voltage (dc)
AAJ030-001 power socket type
AAJ047-001 switch type

AAA561-001 01

Signal sockets **SIG**

A set of sockets for which each socket is described by the same set of data element types.

AAA562-001 01

Sockets for quartz crystals **XTAL**

A set of sockets for mounting and connecting to quartz crystals for which each socket is described by the same set of data element types.

AAA563-001 01

Lighting sockets **LIGHT**

A set of sockets intended for use in lighting applications for which each socket is described by the same set of data element types.

AAA564-001 01

Fuse holders and sockets **FUSE**

A set of sockets or holders for mounting and connecting to fuses for which each socket or holder is described by the same set of data element types.

AAA565-001 01

Sockets for antenna feeders **ANT**

A set of sockets intended for connection to antenna feeders for which each socket is described by the same set of data element types.

AAA566-001 01

Small terminals **SM**

A set of small terminals for which each terminal is described by the same set of data element types.

NOTE
SMALL TERMINALS are terminals which typically only have the facility for connecting one, two or three conductors.

Properties
AAJ032-001 small terminal type

AAA569-001 01

Terminal arrays **ARRY**

A set of terminal arrays for which each array is described by the same set of data element types.

Properties
AAJ033-001 terminal array type

AAA572-001 01

Terminal boards **BRD**

A set of terminal boards for which each terminal board is described by the same set of data element types.

AAA573-001 01

Terminal rods **ROD**

A set of terminal rods for which each terminal rod is described by the same set of data element types.

AAA575-001 01

Current-activated fuses **CUR**

A set of fuses activated by excess current for which each fuse is described by the same set of data element types.

AAA576-001 01

Thermally-activated fuses **THERM**

A set of thermally-activated fuses for which each fuse is described by the same set of data element types.

Properties
AAJ036-001 active element

AAA578-001 01

Fibre optics **FIBOPTIC**

A set of fibre optic devices for which each component can be described by the same set of data element types.

AAJ048-001 fibre optic component

Subclasses
AAA579-001 Fibre optic links
AAA580-001 Fibre optic connectors
AAA581-001 Fibre optic switches
AAA582-001 Fibre optic branches
AAA583-001 Fibre optic couplers/splicers
AAA584-001 Fibre optic attenuators
AAA585-001 Fibre optic detectors
AAA586-001 Fibre optic isolators
AAA587-001 Fibre optic networks
AAA588-001 Fibre optic light sources
AAA589-001 Fibre optic modulators
AAA590-001 Fibre optic transmitters and receivers
AAA591-001 Optical waveguiders
AAA592-001 Fibre optic cables
AAA593-001 Fibre optic filters
AAA594-001 Fibre optic lenses

AAA579-001 01

Fibre optic links **LINK**

A set of fibre optic links for which each component can be described by the same set of data element types.

AAA580-001 01

Fibre optic connectors **CONN**

A set of fibre optic connectors for which each connector can be described by the same set of data element types.

AAA581-001 01

Fibre optic switches **SWI**

A set of fibre optic switches for which each switch can be described by the same set of data element types.

AAA582-001 01

Fibre optic branches **BRA**

A set of fibre optic branches for which each component can be described by the same set of data element types.

AAA583-001 01

Fibre optic couplers/splicers **COUP**

A set of fibre optic couplers or splicers for which each component can be described by the same set of data element types.

AAA584-001 01

Fibre optic attenuators **ATT**

A set of fibre optic attenuators for which each component can be described by the same set of data element types.

AAA585-001 01

Fibre optic detectors **DET**

A set of fibre optic detectors for which each component can be described by the same set of data element types.

AAA586-001 01

Fibre optic isolators **ISOL**

A set of fibre optic isolators for which each component can be described by the same set of data element types.

AAA587-001 01

Fibre optic networks **NETW**

A set of fibre optic networks for which each network can be described by the same set of data element types.

AAA588-001 01

Fibre optic light sources **SOURC**

A set of light sources for use in fibre optic systems for which each light source can be described by the same set of data element types.

AAA589-001 01

Fibre optic modulators **MOD**

A set of fibre optic modulators for which each component can be described by the same set of data element types.

AAA590-001 01

Fibre optic transmitters/receivers **TXRX**

A set of fibre optic transmitters and receivers for which each component can be described by the same set of data element types.

AAA591-001 01

Optical waveguiders **WG**

A set of optical waveguiders for which each component can be described by the same set of data element types.

AAA592-001 01

Fibre optic cables **CAB**

A set of fibre optic cables for which each cable can be described by the same set of data element types.

AAA593-001 01

Fibre optic filters **FIL**

A set of fibre optic filters for which each filter can be described by the same set of data element types.

AAA594-001 01

Fibre optic lenses **LENS**

A set of lenses for use with fibre optic systems for which each lens can be described by the same set of data element types.

AAA595-001 01

Spark gaps **SPARK**

A set of spark gaps of which each can be described with the same group of data element types.

Properties
AAJ082-001 dc breakdown voltage
AAJ083-001 breakdown voltage tolerance
AAJ084-001 capacitance
AAJ087-001 insulation resistance

AAJ081-001 spark gap type

Subclasses
AAA605-001 Air spark gaps
AAA606-001 Gas-filled spark gaps

AAA596-001 01

Resonators **RESON**

A set of resonators of which each can be described with the same group of data element types.

Properties
AAJ088-001 resonator type
AAJ089-001 resonant frequency
AAJ090-001 quality factor

AAA597-001 01

Image pickup devices **IMAGE**

A set of image pickup devices of which each device can be described with the same group of data element types.

Properties
AAJ074-001 image pickup device type

AAA601-001 01

Fixed inductors **FIX**

A set of variable inductors of which each inductor can be described with the same group of data element types.

AAF390-002 type of inductor

Subclasses
AAA225-001 Deflection units
AAA226-001 Chokes
AAA227-001 Coils
AAA228-001 Linearity control units
AAA603-001 Antenna inductors
AAA604-001 Solenoids

AAA602-001 01

Variable inductors **VAR**

A set of fixed inductors of which each inductor can be described with the same group of data element types.

Properties
AAJ078-001 variable inductor type
AAJ079-001 minimum inductance
AAJ080-001 maximum inductance

AAA603-001 01

Antenna inductors **ANT**

A set of inductors for use with antennas of which each inductor can be described with the same group of data element types.

AAA604-001 **01**

Solenoids **SOL**

A set of solenoids of which each solenoid can be described with the same group of data element types.

AAA605-001 01

Air spark gaps **AIR**

A set of air spark gaps of which each spark gap can be described with the same group of data element types.

AAA606-001 01

Gas-filled spark gaps **GAS**

A set of gas-filled spark gaps of which each spark gap can be described with the same group of data element types.

Properties
AAJ085-001 withstanding voltage
AAJ086-001 surge current

AAA607-001 01

Rotary precision potentiometers **PRECROT**

A set of precision potentiometers with continuously-variable rotary adjustment for which each potentiometer is described by the same set of data element types.

NOTE
PRECISION ROTARY POTENTIOMETERS are potentiometers for which the mechanical adjustment is achieved by turning a shaft and whose position can be set with a high degree of precision.

Properties
AAE145-005 spindle material of potentiometer
AAE147-005 spindle length
AAE148-005 spindle diameter
AAE173-005 total mechanical rotation
AAJ014-001 potentiometer size
AAJ015-001 rotation torque
AAJ123-001 potentiometer type
AAJ124-001 number of turns

AAA608-001 01

Power rotary potentiometers **PWRROT**

A set of power potentiometers with continuously-variable rotary adjustment for which each potentiometer is described by the same set of data element types.

NOTE
POWER ROTARY POTENTIOMETERS are potentiometers for which the mechanical adjustment is achieved by turning a shaft and which are typically capable of dissipating powers of more than 10 W.

Properties
AAE145-005 spindle material of potentiometer
AAE147-005 spindle length
AAE148-005 spindle diameter
AAE173-005 total mechanical rotation
AAJ014-001 potentiometer size
AAJ015-001 rotation torque
AAJ123-001 potentiometer type
AAJ124-001 number of turns

AAA609-001 01

Low-power rotary potentiometers **LPROT**

A set of low-power potentiometers with continuously-variable rotary adjustment for which each potentiometer is described by the same set of data element types.

NOTE
LOW-POWER ROTARY POTENTIOMETERS are potentiometers for which the mechanical adjustment is achieved by turning a shaft and which are typically able to dissipate powers up to 10 W.

Properties
AAE145-005 spindle material of potentiometer
AAE147-005 spindle length
AAE148-005 spindle diameter
AAE173-005 total mechanical rotation
AAJ014-001 potentiometer size
AAJ015-001 rotation torque
AAJ123-001 potentiometer type
AAJ124-001 number of turns

AAA610-001 01

Connector parts **CONPART**

A set of connector parts of which each part can be described with the same group of data element types.

NOTE
CONNECTOR PARTS are components which may be used to assemble complete connectors, which are used as accessories to a connector or which are needed in the assembly or disassembly of connectors.

AAF464-001 connector part type

Subclasses
AAA524-001 Connector contacts
AAA525-001 Connector accessories
AAA611-001 Connector tools
AAA612-001 Connector shells
AAA613-001 Connector inserts

AAA611-001 01

Connector tools **TOOL**

A set of connector tools of which each tool can be described with the same group of data element types.

NOTE
CONNECTOR TOOLS are tools which are needed for the assembly, disassembly, installation or repair of connectors. They include such items as spanners, keys, jigs and gauges.

Properties
AAF466-001 tool type

AAA612-001 01

Connector shells **SHELL**

A set of connector shells of which each shell can be described with the same group of data element types.

NOTE
CONNECTOR SHELLS are the external housing of connectors which normally provide the mechanical mating.

Properties
AAE351-006 housing material
AAF467-001 shell type

AAA613-001 01

Connector inserts **INSERT**

A set of connector inserts of which each insert can be described with the same group of data element types.

NOTE
CONNECTOR INSERTS are formed from insulating material and provide the mechanical support for the connector contacts within the connector shell.

Properties
AAF468-001 insert type
AAF469-001 insert material

Annex C
(normative)

Data element type definitions

AAD001-001 **02** **M..17** **A52**
simple string

die identifier **die ID**

A code based on the IEC 60191 code to identify the die

NOTE
The code has the form A-XBCC-Dnn/mmm, where
A is a shape class code
X is a code for the encapsulation material
B is a terminal position code
CC is the body style code
D is the terminal shape code
nn is the number of terminals
mmm is a sequence number to distiguish uniquely dies whose codes would otherwise be identical.

IEC 60191-4 (1999)

AAD002-001 **01** **M..17** **A52**
simple string

die name **die name**

The name or identifier given to the die by the manufacturer.

IEC 62258

AAD003-001 **01** **M..17** **A52**
simple string

die version **die version**

The code given by the manufacturer to identify the version of the die.

IEC 62258

AAD004-001 **01** **M..4** **A52**
simple non-quantitative code

die type code **die code**

The mnemonic code for the physical form in which the die or wafer is supplied

BARE = bare die with pads on one side and without connection structure
BUMP = bare die with bumped pads
DUAL = bare die with pads on both surfaces
LEAD = bare die with attached lead frame
MPD = minimally packaged die device

IEC 62258

REMARKS:
If the die or wafer is in its original form, then the code is BARE or DUAL. Die with codes BUMP or LEAD have been post-processed to add the solder bumps or metal lead frame respectively.

AAD005-001 **01** **M..17** **A57**
simple string

substrate material **substrate**

The constitution of the bulk material which forms the base of the die process technology

IEC 62258

REMARKS:
In most cases the substrate is composed of a single material such as silicon

AAD006-001 **02** **M..4** **A56**
simple non-quantitative code

connection requirement code conn req code

The mnemonic code used to identify the requirement for electrical connection to the die substrate.

CONN= must be connected
ISOL = must be isolated
N/A = not applicable
N/K = requirement not known
OPT = connection optional

IEC 62258

REMARKS:
Where the value of the code is ISOL, no connection may be made to the substrate.
Where the value of the code is OPT, connection to the substrate is optional but any connection made must be to the supply as defined by substrate connection.
Where the value of the code is CONN, a connection from the substrate to a terminal on the die or to a supply terminal is mandatory.
Where the value of the code is N/A connection to the substrate is not appropriate or not possible.
Where the value of the code is N/K no information on the connection requirement is available.

AAD007-001 **01** **M..17** **A56**
simple string

substrate connection substr conn

The name of the supply connection to which a substrate connection, if required, must be made.

NOTE
A value is not required when the substrate must be isolated.

IEC 62258

REMARKS:
The value to be assigned is the name of a supply connection which is defined elsewhere within a database.

AAD008-001 **01** **M..17** **A59**
simple string

die test level code test level

The code or designation given by a manufacturer to the schedule of tests applied to assess the performance characteristics and to conduct burn-in for a die.

IEC 62258

AAD009-001 **01** **NR2..2.2** **Q59**
level minTyp real measure
%

die yield yield
yield

The fraction of die (in %) as specified by level (minTyp) which function according to specification on delivery to a customer.

NOTE
For low defect rates, yield and DPM (in 10^{-6}) are related by the formula yield = 100 – DPM/1.0E4

IEC 62258

REMARKS:
Where a minimum figure is quoted, this will normally be a guarantee of delivered quality. Where a typical figure is given, this is to be interpreted as an average for the processes employed.

AAD010-001 **01** **M..70** **A58**
simple string

die description die desc

A description of the physical form of the die including information on solder bumps and lead frame where applicable.

IEC 62258

AAD011-001 **01** **NR2 S..3.3** **T03**
level nom real measure
m

wafer size W_size
W_{size}

The diameter of the wafer on which the die is fabricated

NOTE
Since this is only a nominal value for information purposes, inch dimensions should be converted at the rate of 25 mm to one inch.

IEC 62258

AAD012-001 **02** level nom **NR1..4** integer measure 1 **Q56**

termination number **n_term**
termination identifier n_{term}

A numeric value which identifies the termination uniquely for each device.

IEC 62258

REMARKS:
Where the manufacturer has allocated a unique number to each terminal, that numbering identification should be used.
When that is not the case, for devices with terminals around the periphery, numbers should be allocated in an anticlockwise direction starting with the terminal nearest to the top left-hand corner of the die as viewed from the side containing the terminals.

AAD013-001 **01** simple **M..17** string **A91**

manufacturer pad identifier **manuf pad ID**

The identification allocated to a pad by the manufacturer in his data sheet.

IEC 62258

AAD014-001 **01** simple **M..17** string **A91**

pad geometry name **pad geom name**

The name given to identify a particular pad geometry.

IEC 62258

REMARKS:
The name used is arbitrary and is only used as a link between a pad geometry definition and a pad instance. The name must be unique within the list of names for any particular die.

AAD015-001 **01** level nom **NR3 S..3.3ES2** real measure m **T03**

pad x position **pad x**
pad_x

The value (in m) of the x-coordinate of the geometric centre of a pad referred to the geometric origin of the die as origin.

NOTE
For polygonal pads, the geometric centre of the pad is taken as mid-way between the extremes of the x and y dimensions

IEC 62258

DAE002-001 Die dimensions

AAD016-001 **01** level nom **NR3 S..3.3ES2** real measure m **T03**

pad y position **pad y**
pad_y

The value (in m) of the y-coordinate of the geometric centre of a pad referred to the geometric origin of the die as origin

NOTE
For polygonal pads, the geometric centre of the pad is taken as mid-way between the extremes of the x and y dimensions

IEC 62258

DAE002-001 Die dimensions

AAD017-001 **02** simple **M..7** string **A58**

pad orientation **pad orientation**

The orientation code for a pad related to reference axes

NOTE
The pad orientation is given by the angle of clockwise orientation, in degrees, followed optionally by letter codes to indicate mirroring. If the letters MX are included the orientation of the pad is mirrored in the X-axis, whilst if the letters MY are included the orientation of the pad is mirrored in the Y-axis. Both MX and MY may be present simultaneously and all mirroring shall be done about the geometric reference centre of the terminal shape. The mirroring operation (if any) shall be carried out first, then the terminal shall be rotated by the orientation angle.

IEC 62258

AAD018-001 **01** **NR1..2** **Q56**
level nom integer measure
1

number of bond sites **bond sites**
n_{bond}

The number of separate sites on a pad to which bonds can and should be made.

IEC 62258

AAD019-001 **01** **M..35** **A91**
simple string

signal name **signal name**

The name given to the signal appearing at the terminal of a device.

IEC 62258

AAD020-001 **01** **M..8** **A91**
simple non-quantitative code

signal type **signal type**
I/O type

The code of the type of signal associated with a terminal.

NOTE
The value shows whether the signal is analogue or digital, or whether connection to the terminal provides a supply or non-logic function, etc.

A = analogue signal
B = digital bidirectional
G = ground
I = digital input
N = not connected
O = digital output
T = test point
U = unknown connection
V = supply voltage
X = internally connected

IEC 62258

AAD021-001 **01** **M..17** **A91**
simple string

electrical reference **elect ref**

A reference to a definition of a power supply or logic signal connection

NOTE
The value to be assigned must be a name which has been given to a signal definition in a power, digital or analogue connection table.

IEC 62258

AAD022-001 **01** **A2** **A56**
simple non-quantitative code

signal direction **I/O direction**
input/output direction

The code of the direction of signal flow at a terminal

BI = bidirectional
IP = input only
OP = output only

IEC 62258

AAD023-001 **01** **M..17** **A56**
simple string

swap codes **swap codes**

The codes which indicate connection interchangeability of a terminal with other terminals.

IEC 62258

AAD024-001 **02** **A..4** **A58**
simple non-quantitative code

pad shape **pad shape**

The code of the shape of a bonding pad on a die.

CIRC = circular
ELL = elliptical
POLY = polygonal
RECT = rectangular

IEC 62258

AAD025-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pad length **b**
b

The length (in m) of a rectangular or elliptical pad measured in a direction parallel to the x-axis.

IEC 62258

DAE002-001 Die dimensions

AAD026-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pad width **c**
c

The width (in m) of a rectangular or elliptical pad measured in a direction parallel to the y-axis.

IEC 62258

DAE002-001 Die dimensions

AAD027-001 **01** **NR1..2** **Q56**
level nom integer measure
1

number of polygon vertices **n_v**
n_v

The number of vertices of a polygonal pad.

IEC 62258

REMARKS:
A polygonal pad must have at least three vertices.

AAD028-001 **01** **NR1..2** **Q56**
level nom integer measure
1

vertex number **v_p**
v_p

The vertex number of a polygonal pad.

IEC 62258

AAD029-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

vertex x-coordinate **x_v**
x_v

The value (in m) of the x-coordinate of a vertex of a polygonal pad relative to the centre of the pad.

IEC 62258

AAD030-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

vertex y-coordinate **y_v**
y_v

The value (in m) of the y-coordinate of a vertex of a polygonal pad relative to the centre of the pad.

IEC 62258

AAD031-001 **01** **A3** **A56**
simple non-quantitative code

supply variability **variability**

The code indicating whether a power supply is fixed or variable.

FIX = fixed supply
VAR = variable supply

IEC 62258

AAD032-001 **02** **NR2 S..3.3** **E06**
level miNoMax real measure
V

supply voltage **V_sup**
V_{sup}

The value as specified by level (miNoMax) of a dc voltage (in V) connected to the supply terminal of an integrated circuit.

NOTE
For a fixed supply, the nominal value is given with the minimum and maximum giving the maximum permissible excursions from that value.
For a variable supply voltage, the minimum and maximum values are the permissible extremes of the range of supply voltages.

IEC 62258

AAD033-001 **01** **NR3..3.3ES2** **E01**
level max real measure
A

pad supply current **I_pad**
pad current I_{pad}

The absolute maximum value of the current (in A) that should flow through a single bond site on a supply pad.

IEC 62258

AAD049-001 **01** **M..17** **A91**
simple string

supply name **supply name**

The name given to a terminal for the supply of power to a device.

IEC 62258

REMARKS:
Names commonly used include Vcc, Vss, Vdd, GND, V+ and V-.

AAD054-001 **01** **NR3 S..3.3ES2** **E01**
level typMax real measure
A

supply current **I_sup**
I_{sup}

The total value as specified by level (typMax) of the dc current (in A) passing through all terminals of an integrated circuit connected to the same supply voltage.

NOTE
The values are given for the maximum value of the corresponding supply voltage.

IEC 62258

AAD055-001 **01** **M..8** **A53**
simple set of non-quantitative codes

supply packing code **packing code**

The mnemonic code for the form of packing used for the supply of a die or wafer.

BOX = supplied unsawn in wafer boxes
FILM = supplied sawn on plastic film
GELFRAME= supplied in GEL-PAK™ for sawn wafers
GELPAK = supplied in GEL-PAK™
SURFTAPE= supplied on SurfTape™
TAPE = supplied on embossed tape
WAFFLE = supplied in waffle pack or tray

IEC 62258

AAD056-001 **01** **M..8** **A55**
simple non-quantitative code

supply form code **supply code**

The mnemonic code for the form in which the die is supplied either in wafer form or as an individual dice

BARE = individual die without connection structures
BUMP = individual bumped die
MPD = individual die in minimally packaged form
SAWN = sawn wafer
WAFER = unsawn wafer

IEC 62258

AAD060-001 **01** **M..2000** **A11**
simple string

test procedure description **test procedure**

A description of the procedures used in the test and evaluation of a die.

IEC 62258

AAD070-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

die step dimension x **D**
die length D

The nominal value (in m) of the step interval of die patterns on a wafer measured in the direction of the x axis of the coordinate system established for the wafer.

IEC 62258

REMARKS:
The length of the die will normally be closely related to the step interval but the precise value depends on width of saw cuts, tolerances, etc.

DAE002-001 Die dimensions

AAD071-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

die step dimension y **E**
die width E

The nominal value (in m) of the step interval of die patterns on a wafer measured in the direction of the y-axis of the coordinate system established for the wafer.

IEC 62258

REMARKS:
The width of the die will normally be closely related to the step interval but the precise value depends on width of saw cuts, tolerances, etc.

DAE002-001 Die dimensions

AAD072-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

die thickness **A**
wafer thickness A
thickness

The perpendicular distance (in m) between the two plane faces of a die or wafer.

IEC 62258

DAE002-001 Die dimensions

AAD078-001 **01** **M..35** **A57**
simple string

passivation material **passivation**

The material used to cover the surface of the die for passivation.

IEC 62258

AAD081-001 **01** **A1** **A58**
simple non-quantitative code

die surface **die surface**

The code identifying the surface of a die on which a pad is situated when pads exist on both surfaces.

NOTE
The value may be blank when pads exist on only one surface of the die.

B = bottom surface
U = upper surface

IEC 62258

AAD082-001 **01** **M..35** **A59**
simple string

test name **test name**

A short title for the procedures used in the test and evaluation of a die.

NOTE
This is a short name for a procedure described more fully in AAD060-001.

IEC 62258

AAD085-001 **01** **M..35** **A52**
simple string

die type **die type**

A short title for the physical form of a die or wafer.

NOTE
This is a short title for the form described more fully in AAD084-001. The value list consists of the value meanings from AAD004-001.

IEC 62258

AAD086-001 **01** **M..175** **A52**
simple string

die type description **die desc**

The description of the physical form of a die or wafer.

IEC 62258

AAD087-001 **01** **M..35** **A55**
simple string

supply form **supply form**

A short title for the form in which a die or wafer is supplied.

NOTE
This is a short title for the form described more fully in AAD086-001.

IEC 62258

AAD088-001 **01** **M..175** **A55**
simple string

supply form description **supply form des**

The description of the form in which a die or wafer is supplied.

IEC 62258

AAD089-001 **01** **M..35** **A53**
simple string

supply packing **packing**

A short title for the form of packing used for supply of a die or wafer.

NOTE
This is a short title for the form described more fully in AAD088-001.

IEC 62258

AAD090-001 **01** **M..175** **A53**
simple string

supply packing description **packing desc**

The description of the form of packing used for the supply of a die or wafer.

IEC 62258

AAD091-001 **01** **M..35** **A56**
simple string

connection requirement **conn req**

The requirement for electrical connection to the die substrate.

IEC 62258

AAD093-001 **01** **M..175** **A56**
simple string

substrate connection **subst conn desc**

Description of the requirement, if any, of a connection to the substrate of a die.

IEC 62258

AAD095-001 **02** **X1** **A59**
simple string

die yield code **yield code**

The single-character code giving the range of actual yield figures for a die.

NOTE
The code is a single hexadecimal digit in the range 0 to F.

IEC 62258

AAD115-001 **01** **M..17** **A58**
simple non-quantitative code

geometric units **geometric units**

The code identifying the units in which die dimensions are given.

NOTE
To comply with IEC 61360, the units should be given in metres (m) and these will be the default units.

μm = micrometre (micron)
m = metre
mil = mil (1.0E-3 inch)
mm = millimetre

IEC 62258

AAD116-001 **01** **NR1..4** **Q56**
level nom integer measure
1

pad geometry count **n_g**
n_g

The number of different pad shapes on a die to which different pad geometry names have been allocated.

IEC 62258

AAD117-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

size tolerance **S_tol**
S_{tol}

The tolerance (in m) on the length and width dimensions of a die.

IEC 62258

AAD118-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

thickness tolerance **T_tol**
T_{tol}

The tolerance (in m) on the thickness of a die or wafer.

IEC 62258

AAD119-001 **01** **M..35** **A55**
simple string

backside finish **backside finish**

The finish applied to the surface of the substrate of a die opposite to that to which the connections are made.

IEC 62258

AAD120-001 **01** **M..70** **A57**
simple string

pad metallisation **metallisation**

The material used to form the pads on a die to which connection is made.

NOTE
The information given should include the materials used and the thickness of all layers.

IEC 62258

AAD121-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pad diameter **$fb**
Øb

The nominal diameter (in m) of a circular pad.

IEC 62258

AAD122-001 **01** **M..70** **A58**
simple string

bump size **bump size**

Description of the size, shape and height of the bumps on a bumped die.

IEC 62258

AAD123-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

bumped height **A_1**
A_1

The perpendicular distance (in m) as specified by level (miNoMax) between a plane on which the bumps rest and the top surface of a bumped die.

IEC 62258

REMARKS:
The mounted height of a bumped die will normally be less than A_1.

DAE003-001 Bumped die dimensions

AAD124-001 **01** **M..35** **A57**
simple string

bump material **bump material**

The material used to form the bumps on a bumped die.

IEC 62258

AAD125-001 **01** **M..35** **A57**
simple string

lead-frame material **lead material**

The material used to form the leads on a die with attached lead frame.

IEC 62258

AAD126-001 **01** **M..70** **A55**
simple string

underfill **underfill**

Details of any requirements or recommendations for underfill between a bumped die or a minimally-packaged device and its mounting surface.

IEC 62258

AAD127-001 **01** **M..35** **A58**
simple string

die picture **die picture**

Reference to a file or document containing a picture of the die which shows the positions of all pads.

IEC 62258

AAD129-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

die centre x-position **X_0**
X_0

The nominal distance (in m) measured in the x-direction of the geometric centre on the surface of a die from the geometric origin.

IEC 62258

DAE002-001 Die dimensions

AAD130-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

die centre y-position **Y_0**
Y_0

The nominal distance (in m) measured in the y-direction of the geometric centre on the surface of a die from the geometric origin.

IEC 62258

DAE002-001 Die dimensions

AAD131-001 **01** **NR2..2.2** **Q59**
level typMax real measure
ppm

defect rate **DPM**
DPM

The average fraction of die (in parts per million) which which may be expected to be defective on delivery to a customer.

NOTE
For low defect rates, DPM and yield (in %) are related by the formula DPM = 1.0E4*(100 – yield)

IEC 62258

REMARKS:
Where a maximum figure is quoted, this will normally be a guarantee of delivered quality. Where a typical figure is given this is to be interpreted as an average for the processes employed.

AAD132-001 **01** **X1** **A59**
simple non-quantitative code

test flow **test flow**

The code for the basic test procedures applied to a die or wafer.

A = ac and dc tests
D = dc tests only
K = ac and dc tests with full function
N = not tested
S = ac and dc tests at full speed
X = no data available

IEC 62258

AAD133-001 **01** **X1** **A59**
simple non-quantitative code

temperature specification **test temp**
test temperatures

The code for the basic temperature specification for tests applied to a die or wafer.

A = ambient only
C = cold, hot and ambient (three tests)
H = hot and ambient (two tests)
K = full range to specification
S = coverage to special requirements
X = no data available

IEC 62258

AAD134-001 **01** **X1** **A59**
simple non-quantitative code

process options **options**
test options

The code for the basic options of test, inspection and burn-in applied to a die or wafer.

B = burn-in (100%)
K = special KGD test, wafer level
L = lot-acceptance testing
M = scanning electron microscope
R = radiation
S = special stress tests at wafer probe
V = visual inspection
X = no data available

IEC 62258

AAD137-001 **01** **X1** **A52**
simple non-quantitative code

conformity level **conformity**

The code to indicate the level of conformity with a relevant part of ES 59008 as defined in ES 59008-1

1 = conformity level 1
2 = conformity level 2
3 = conformity level 3

IEC 62258

AAD140-001 **01** **M..35** **A21**
simple string

die manufacturer **manufacturer**

The original manufacturer of the die device

IEC 62258

AAD141-001 **01** **M..35** **A21**
simple string

die supplier **supplier**

The organisation that supplied the die device, where different from the original manufacturer

IEC 62258

AAD142-001 **01** **M..35** **A21**
simple string

die data source **data source**

The organisation that supplied the data on the die device, where different from the original manufacturer

IEC 62258

AAD143-001 **01** **M..35** **A51**
simple string

packaged part name **packaged part**

The manufacturer's type number or part name for an packaged part equivalent to the die device

IEC 62258

AAD144-001 **01** **M..8** **A58**
simple non-quantitative code

geometric view **geometric view**

The code that specifies the geometric view that shall apply to all geometric shapes used in drawings of a die device

BOTTOM = viewed from the bottom (non-active side)
TOP = viewed from the top (active side)

IEC 62258

AAD145-001 **01** **NR1..4** **Q56**
simple integer measure
1

terminal count **n_2**
n_2

The total number of terminals on a die device

IEC 62258

AAD146-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

bump height **h_b**
h_b

The nominal height (in m) of the bumps on a bumped die measured as the perpendicular distance between the die surface and the plane surface on which the die is mounted

IEC 62258

DAE003-001 Bumped die dimensions

AAD147-001 **01** **NR3 S..3.3ES2** **T03**
level minMax real measure
m

bump height tolerance **h_b_tol**
h_{btol}

The tolerance (in m) on the height of the bumps over the surface of a bumped die

IEC 62258

AAD148-001 **01** **M..17** **A57**
simple string

bulk material **bulk material**

The constitution of the bulk material which forms the base of the die process technology where this is different from the substrate material on which the active die is formed

IEC 62258

AAD149-001 **01** **NR2 S..3.3** **H02**
level max real measure
Cel

maximum assembly temperature **T_assy**
T_{assy}

The maximum temperature (in Cel) to which the backside surface of a die device may be raised during assembly

IEC 62258

AAD150-001 **01** **M..70** **A57**
simple string

encapsulation material **encapsulation**

The material used to form an external case or coating on an electric component to protect it from the environment

IEC 62258

AAD151-001 **01** **NR3..3.3ES2** **E35**
level max real measure
W

power limit **P_lim**
P_{lim}

The maximum power (in W) dissipated by a semiconductor device under typical worst-case conditions

IEC 62258

AAD153-001 **01** **X1** **A59**
simple non-quantitative code

test reliability code **reliability**

The code to indicate the availability of reliability information for a die device

K = data based on semiconductor die
P = data based on packaged counterparts
X = no data available
Y = data available on receipt of NDA

IEC 62258

AAD154-001 **01** **X1** **A59**
simple non-quantitative code

test maturity code **maturity**

The code to indicate the maturity of the production process for a die device

D = semiconductor die under development
N = not recommended for new designs
O = die will soon be made obsolete
P = pilot production started
S = die available in sample quantities
U = die is no longer available
V = volume manufacture : parameters, yields are stable
X = no data available
Y = data available on receipt of NDA

IEC 62258

AAD155-001 **01** **M..35** **A55**
simple string

MPD delivery form **MPD delivery**

The form in which a minimally-packaged device is delivered to the user

IEC 62258

AAD156-001 **01** **M..17** **A91**
simple string

fiducial name **fiducial name**

The name given to identify a particular fiducial

IEC 62258

REMARKS:
The name used is arbitrary and is only used as a link between a fiducial geometry definition and a fiducial instance. The name must be unique within the list of names for any particular die device.

AAD157-001 **01** **M..35** **A62**
simple string

fiducial file name **fiducial file**

The name of a file containing an image of the fiducial on the die device.

IEC 62258

AAD158-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

fiducial width **x_f**
x_f

The nominal length (in m) of a fiducial measured in a direction parallel to the x-axis.

IEC 62258

AAD159-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

fiducial height **y_f**
y_f

The nominal width (in m) of a fiducial measured in a direction parallel to the y-axis.

IEC 62258

AAD160-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

fiducial x position **fid_x**
fid_x

The nominal value (in m) of the x-coordinate of the geometric centre of a fiducial referred to the geometric origin of the die as origin.

IEC 62258

AAD161-001 **01** **NR3 S..3.3ES2** **T03**
level nom real measure
m

fiducial y position **fid_y**
fid_y

The nominal value (in m) of the y-coordinate of the geometric centre of a fiducial referred to the geometric origin of the die as origin.

IEC 62258

AAD162-001 **02** **M..7** **A58**
simple string

fiducial orientation **fid orient**

The orientation code for a pad related to reference axes.

NOTE
The fiducial orientation is given by the angle of clockwise orientation, in degrees, followed optionally by letter codes to indicate mirroring. If the letters MX are included, the orientation of the fiducial is mirrored in the X-axis, whilst if the letters MY are included the orientation of the fiducial is mirrored in the Y-axis. Both MX and MY may be present simultaneously and all mirroring shall be done about the geometric reference centre of the fiducial shape. The mirroring operation (if any) shall be carried out first, then the fiducial shall be rotated by the orientation angle.

IEC 62258

AAE000-001 **01** **X..8** **A52**
simple non-quantitative code

IEC reference class **IEC class**

Code of the main class in the IEC reference collection to which an item belongs.

CO = component
FEA = features
GEO = geometry
MA = material

AAE001-005 **01** **X..3** **A52**
simple non-quantitative code

main class of component **main class**

Code of the main functional class to which a component belongs.

EE = electric/electronic component
EM = electromechanical component
ME = mechanical component
MP = magnetic part

AAE002-006 **01** **X..8** **A52**
simple non-quantitative code

category EE component category EE

Code of the category to which an electric-electronic component belongs.

AMP = amplifier
ANT = antenna
BAT = battery
CAP = capacitor
CND = conductor
DEL = delay line
DID = diode device
FIBOPTIC = fibre optics
FIL = filter
IC = integrated circuit
IND = inductor
LAM = lamp
LCD = liquid crystal display
MIC = microwave components
OPT = optoelectronic device
OSC = oscillator
PE = piezoelectric device
PWC = printed wiring components
RES = resistor
RESON = resonators
SEN = sensor
SPARK = spark gaps
TFM = transformer
TRA = transistor
TRG = trigger device
TUB = tube
TUN = tuner

AAE003-006 **01** **X..3** **A56**
simple non-quantitative code

adjustability type adjustability

Code of the type of mechanical adjustability of a capacitor, resistor, inductor or transformer.

FIX = fixed
VAR = variable

AAE004-007 **01** **X..8** **A57**
simple non-quantitative code

dielectric material type dielectric type
(capacitor) dielectric

Code of the type of dielectric material of a fixed capacitor.

AIR = fixed air capacitor
CER = fixed ceramic capacitor
ELC = fixed electrolytic capacitor
FLM = fixed film capacitor
GLS = fixed glass capacitor
MICA = fixed mica capacitor
MIX = fixed mixed-dielectric capacitor
PAP = fixed paper capacitor

AAE005-006 **01** **X..3** **A51**
simple non-quantitative code

transducer principle trans principle
drive unit type

Code of the transducer principle of a loudspeaker.

ELM = electromagnetic loudspeaker
ELS = electrostatic loudspeaker
ION = ionic loudspeaker
MGD = magnetodynamic loudspeaker
MGS = magnetostriction loudspeaker
MVC = moving conductor loudspeaker
PNM = pneumatic loudspeaker
PXE = piezoelectric loudspeaker

AAE006-006 **01** **M..8** **A55**
simple non-quantitative code

mounting features mtg feature

Code of the mounting features which are designed to fasten a component to its counterpart.

35x15 = width is 35 mm, height is 15mm
35x7.5 = width is 35 mm, height is 7.5 mm
75x25 = width is 75 mm, height is 25 mm
BRC = with bracket
C20 = width 20 mm
C30 = width is 30 mm
C40 = width is 40 mm
C50 = width is 50 mm
HOL = through hole
INS = inserted
SMD = surface mounted
STD = stud
TAP = tapped hole

AAE007-005 **01** **M..3** **A58**
simple non-quantitative code

terminal shape terminal shape

Code of the shape of the terminals of an electric, electronic or electromechanical component.

BUS = bus
CAP = end cap
FLT = flat
PIN = printed wiring pin
SCR = screw
SOL = solid-lead
STD = stud
STL = stranded-lead
TAG = solder tag

AAE008-005 01 M..8 A58
simple non-quantitative code

terminal placement terminal place

Code indicating the placement of the terminals of an electric-electronic or electromechanical component.

AXIAL = axial
CIRC = on circle
DIL = dual in line
GA = grid array
QIL = quadruple in line
RAD = radial
SEND = single ended
SIL = single in line

AAE009-005 01 M..3 A59
simple non-quantitative code

performance grade performance grd

IEC standard code identifying the performance grade of a fixed capacitor.

1 = long-life
2 = general purpose

IEC 60384-2 (1982)

REMARKS:
See IEC 60384-2 (1982) and IEC 60384-4 (1998) for requirements per test.

AAE010-005 02 M..17 A59
simple string

climatic category climatic cat

IEC standard code indicating the climatic category to which a resistor or capacitor belongs.

IEC 60068-1 (8) (1988)

REMARKS:
The category is indicated by a series of three sets of digits separated by oblique strokes corresponding respectively to the temperatures, both cold and hot, and to the number of days of exposure to damp heat (steady state) they will withstand.
(In the first set the digits denote the temperature below zero in Cel, unless otherwise indicated.)

-First set: Two digits denoting the minimum ambient temperature of operation (cold test).

-Second set: Three digits denoting the maximum temperature of operation (dry heat test). Where the temperature requires the use of only two digits, they shall be prefixed by the figure '0' to make up the three digit group.

-Third set: Two digits denoting number of days of the damp heat steady state) test (Ca). Where the duration requires the use of only one digit, it shall be prefixed by the figure '0' to make up the two digit group.

AAE012-005 02 M..35 A61
simple string

international standard internat std

Reference to an international standard describing a component.

REMARKS:
Examples of formats for reference to IEC publications:
- IEC 60147-1D (VI.1.5.1) (1978)
= IEC publication
- IEC/TC47(CO)797(5.1) (1981)
= Publ. of Central office
- IEC/TC47(Sec)797(5.1) (1981)
= Publ of Secretariat

Examples of formats for reference to ISO publications:
- ISO9999 (1985) = ISO publication
- ISO/DP999 (1985) = Draft proposal
- ISO/DIS9999 (1985) = Draft Intern. standard

AAE013-005 **01** **NR3 S..3.3ES2** **E06**
simple real measure
V

voltage (dc) **@U_dc**
$@U_{dc}$

The direct voltage (in V) applied to an electric, electronic or electromechanical component, as a variable.

AAE014-005 **02** **NR1 S..4** **H02**
simple integer measure
Cel

ambient temperature **@T_amb**
ambient free air temperature $@T_{amb}$
$@T_a$

The ambient free air temperature (in Cel) of a component, as a variable.

IEC 60068-1 (1988)

REMARKS:
IEC 60068-1 (1988)
For a heat-dissipating specimen in free air conditions, the ambient temperature is the temperature of the air at such distance from the specimen that the effect of the dissipation is negligible.

AAE017-005 **01** **NR1 S..4** **H02**
level nom integer measure
Cel

reference temperature **T_ref**
T_{ref}

The reference ambient temperature (in Cel) applied to a component.

NOTE
T_{ref} may be used when a number of characteristics are specified at a common ambient temperature.

AAE018-001 **02** **NR2 S..3.3** **E09**
level nom real measure
%

capacitance lower tolerance (%) **C_lt(%)**
$C_{lt(\%)}$

The lower tolerance percentage (in %) of the rated capacitance of a fixed capacitor.

AAE019-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

body length **l_body**
l_{body}

The value as specified by level (miNoMax) of the length (in m) of the body of a component in the x-direction.

AAE020-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

body height **h_body**
h_{body}

The value as specified by level (miNoMax) of the height (in m) of the body of a component in the z-direction.

AAE021-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

body breadth **b_body**
b_{body}

The value as specified by level (miNoMax) of the breadth (in m) of the body of a component in the y-direction.

AAE022-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

outside diameter **d_out**
d_{out}

The value as specified by level (miNoMax) of the outside diameter (in m) of a component with a body of circular cross-section.

AAE023-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal diameter **d_term**
d_{term}

The value as specified by level (miNoMax) of the diameter (in m) of the terminals of an electric-electronic or electromechanical component.

AAE024-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

terminal pitch **p_term**
p_{term}

The nominal pitch (in m) of the terminals of an electric, electronic or electromechanical component.

IEC 60050 (411) (1973)

AAE027-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

mounted height **h_mnt**
mounting height h_{mnt}
seated height

The value as specified by level (miNoMax) of the mounted height of a component (in m), referred to as the seating plane.

REMARKS:
BSI: mounted height (seated height):
The distance of the furthest part of the component above the reference plane measured in a direction perpendicular to that plane.
BSI: seating plane (reference plane):
The surface plane of the circuit on which the component is mounted.

AAE028-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

duration **@dt**
time interval @dt

The time (in s) during which an input quantity (current, voltage, etc.) is applied to a component, as a variable.

AAE029-005 **01** **NR3..3.3ES2** **F03**
simple real measure
Hz

frequency **@f**
@f

The frequency (in Hz) of a sinusoidal input quantity (current, power, voltage, etc.) applied to an electric, electronic or electromechanical component, as a variable.

AAE030-005 **02** **M..8** **A52**
simple non-quantitative code

E series **E series**

IEC code which identifies the preferred value series to which the resistance of a resistor or the capacitance of a capacitor belongs.

E12 = E12
E192 = E192
E24 = E24
E3 = E3
E48 = E48
E6 = E6
E96 = E96

IEC 60063 (Amd2) (1963)

REMARKS:
The E192 series is composed of rounded values of the theoretical numbers $10^n/192$ in which the exponent n is a whole positive or negative number.
The E96 series is derived from the E192 series by omitting alternate terms.
The E48 series is derived from the E96 series by omitting alternate terms.
The E24 series is composed of rounded values of the theoretical numbers $10^n/24$ in which the exponent n is a whole positive or negative number.

AAE031-005 **02** **M..3** **A55**
simple non-quantitative code

electrode technology **electrode techn**

Code identifying the technology by which the electrodes of a fixed film capacitor are made.

MFL = metal foil
MLZ = metallized

AAE033-005 **02** **M..3** **A56**
simple non-quantitative code

voltage application **voltage appl**

Code of the voltage application(s) for which a fixed film capacitor is designed.

AC = ac, designed essentially for alternating voltages
DC = dc, designed essentially for direct voltages
PL = pulse, for use with current or voltage pulses

AAE034-005 02 M..3 A56
simple non-quantitative code

circuit application (capacitor) circuit appl

Code of the circuit application(s) for which a fixed capacitor is designed.

CPL = coupling
DCL = decoupling
DEL = delay
DFL = deflection
FLT = filtering
RIS = radio-interference-suppression
SMT = smoothing
TC = temperature-compensating
TIM = timing
TUN = tuning

AAE035-005 01 M..8 A56
simple non-quantitative code

temperature coefficient code $a

IEC standard code of the temperature coefficient of the capacitance of a fixed class1 ceramic capacitor.

N1000 = -1000 *10**-6/K
N150 = -150 *10**-6/K
N1500 = -1500 *10**-6/K
N220 = -220 *10**-6/K
N2200 = -2200 *10**-6/K
N33 = -33 *10**-6/K
N330 = -330 *10**-6/K
N3300 = -3300 *10**-6/K
N470 = -470 *10**-6/K
N4700 = -4700 *10**-6/K
N5600 = -5600 *10**-6/K
N75 = -75 *10**-6/K
N750 = -750 *10**-6/K
NP0 = 0
P100 = +100 *10**-6/K

IEC 60384-8 (1988)

AAE036-005 01 M..3 A56
simple non-quantitative code

safety class safety class

IEC standard code of the safety/voltage class of a fixed capacitor for radio interference suppression.

U = shock danger on failure; <=125 V mains voltage
X1 = no shock danger on failure; >1,2 kV pulse
X2 = no shock danger on failure; <=1,2 kV pulse
Y = shock danger on failure; 125-250 V mains voltage

AAE037-005 02 M..3 A56
simple string

EIA temperature characteristic code EIA TCh

EIA code of the temperature characteristic of a fixed class2 ceramic capacitor.

EIA RS-198-B (1991)

REMARKS:
First (alphabetic) character indicates $T_{amb-min}$:
X = – 55 degree C
Y = – 30 degree C
Z = + 10 degree C
Second (numeric) character indicates $T_{amb-max}$:
2 = + 45 degree C
4 = + 65 degree C
5 = + 85 degree C
6 = +105 degree C
7 = +125 degree C
Third (alphabetic) character indicates cap. change:
A = +/- 1 %
B = +/- 1,5%
C = +/- 2,2%
D = +/- 3,3%
E = +/- 4,7%
F = +/- 7,5%
P = +/- 10 %
R = +/- 15 %
S = +/- 22 %
T = +22/-33%
U = +22/-56%
V = +22/-82%

X7R corresponds to IEC subclass 2B4
Y5V corresponds to IEC subclass 2F4

AAE038-005 02 X..3 A57
simple non-quantitative code

dielectric class (ceramic cap) ceram diel cls

IEC standard code of the dielectric material class of a fixed ceramic capacitor (with regard to permittivity, losses and temperature stability).

CL1 = class1 ceramic capacitor
CL2 = class2 ceramic capacitor

AAE039-005 03 M..8 A57
simple non-quantitative code

film dielectric material film diel mat

ISO standard code of plastics, used to identify the dielectric material of a fixed film capacitor.

PC = polycarbonate
PETP = polyethylene-terephthalate
PP = polypropylene
PS = polystyrene

AAE040-005 **02** **M..8** **A57**
simple non-quantitative code

electrode material type **electrode mat**

Code of the type of electrode material of an electrolytic capacitor.

Al = aluminium
NSAl = *non-solid aluminium
SAl = *solid aluminium
Ta = tantalum

AAE041-005 **02** **NR1..4** **T07**
level nom integer measure
h

shelf life **shelf life**
shelf life

Duration of storage test (in h) at specified ambient temperature of a fixed electrolytic capacitor. After test and reconditioning the capacitor shall meet stated requirements for change in capacitance, loss angle, dc leakage current, and impedance.

AAE014-005 = ambient temperature

IEC 60384-1 (1999)

REMARKS:
This is a modification of the IEC Dry heat test, with extended duration.

AAE042-005 **03** **NR3..3.3ES2** **E01**
level max real measure
A

leakage current short-term **I_leak(st)**
$I_{leak(st)}$

The maximum leakage current (in A) of a fixed electrolytic capacitor, after the rated voltage has been applied for a specified duration at specified ambient temperature, determined according to IEC 60384-1 (1999).

AAE014-005 = ambient temperature
AAE028-005 = duration

REMARKS:
For leakage current during continuous operation, see AAE043-005.

AAE043-005 **02** **NR3..3.3ES2** **E01**
level max real measure
A

leakage current continuous **I_leak(cont)**
$I_{leak(cont)}$

The maximum leakage current (in A) of a fixed electrolytic capacitor during continuous operation at the rated voltage at specified ambient temperature, determined according to IEC 60384-1(4.9) (1984).

AAE014-005 = ambient temperature

REMARKS:
For leakage current after a given duration: see AAE042-005.

AAE044-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

rated voltage (dc) **U_Rdc**
U_{Rdc}

The maximum direct voltage (in V) which may be applied continuously to a capacitor at any operating ambient temperature below the rated temperature.

AAE045-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

rated voltage (ac) **U_Rac**
ac voltage U_{Rac}

The maximum rms alternating voltage (in V), of mains frequency (50-60 Hz), which may be applied continuously to a film capacitor at any operating ambient temperature below the rated temperature.

NOTE
IEC has changed its definition from rms into peak value.

REMARKS:
For ac capacitors: rated voltage (ac).
For dc capacitors: max. ac voltage.

AAE046-005 **01** **NR3..3.3ES2** **E09**
level miNoMax real measure
F

capacitance **C**
C

The value as specified by level (miNoMax) of the capacitance (in F) of a fixed capacitor at specified frequency and at reference conditions.

AAE029-005 = frequency
AAE995-005 = reference conditions

AAE047-001 **02** **NR2 S..3.3** **E09**
level nom real measure
%

capacitance upper tolerance (%) **C_ut(%)**
$C_{ut(\%)}$

The upper tolerance percentage (in %) of the rated capacitance of a fixed capacitor.

AAE048-005 **03** **NR2..3.3** **E49**
level max real measure
W

maximum noise power **P_n**
power handling capacity P_n
rated power

The maximum noise power (in W) of a moving conductor loudspeaker calculated from the formula: maximum noise voltage squared over the rated impedance.

AAE049-005 **02** **NR1..4** **E33**
level nom integer measure
Ω

rated impedance **R**
R

The nominal substituted dc resistance (in ohms) of a moving conductor loudspeaker.

NOTE
Used when defining the available electric power of the source.

AAE050-005 **02** **NR3..3.3ES2** **F03**
level max real measure
Hz

resonance frequency **f_rsn**
lowest resonance frequency f_{rsn}
fundamental resonance frequency

The maximum value of the lowest resonance frequency of a moving conductor loudspeaker (in Hz), at specified mounting of loudspeaker.

AAE342-005 = mounting of loudspeaker

AAE051-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

centre pole diameter **d_pole**
core diameter d_{pole}

The rounded nominal diameter (in m) of the centre pole of a moving conductor loudspeaker.

AAE053-005 **01** **M..8** **A57**
simple non-quantitative code

magnet material **magnet material**
magnet

Code of the material type of the magnet of a moving conductor loudspeaker.

CER = ceramic
RES = rare earth
STA = steel alloy

AAE054-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

baffle hole length **l_bfl**
l_{bfl}

Recommended nominal length (in m) of the baffle hole of a moving conductor loudspeaker.

IEC 60268-14 (1980)

AAE055-005 01 M..8 A56
simple non-quantitative code

frequency application frequency appl

Code indicating the application frequency range recommended for a moving conductor loudspeaker.

FULLR = full range
SQUAW = squawker (medium range)
TWEET = tweeter (high range)
WOOF = woofer (low range)

AAE056-005 01 NR3..3.3ES2 T03
level nom real measure
m

baffle hole breadth b_bfl
b_{bfl}

Recommended nominal breadth (in m) of the baffle hole of a moving conductor loudspeaker.

IEC 60268-14 (1980)

AAE060-006 01 X..3 A52
simple non-quantitative code

category EM componentcategory EM

Code of the category to which an electromechanical component belongs.

CON = connector
CONPART = connector part
FUS = fuse
LSP = loudspeaker
MIC = microphone
MOT = motor
REL = relay
SWI = switch

AAE061-005 01 M..3 A58
simple non-quantitative code

shape of flange flange shape

Code of the outer shape of the flange of a moving conductor loudspeaker.

CRC = circular
CRE = circular with ears
ELE = elliptical with ears
ELT = elliptical
OCT = octagonal
RCT = rectangular
SQR = square

IEC 60268-14 (1980)

AAE063-005 04 NR3..3.3ES2 E33
level min real measure
Ω

insulation resistance R_ins
R_{ins}

The minimum insulation resistance (in ohms) between terminals of a fixed capacitor, determined according to IEC 60384-1(4.5) (1999) at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1 The insulation resistance is measured after a voltage has been applied for 1 min +/- 5 s. The relationship between this voltage and the rated voltage (dc) is prescribed in IEC 60384-1 (1999).

Voltage rating of capacitor	Measuring voltage
U_R or U_C < 10 V	U_R or U_C +/-10%
10 V <= U_R or U_C < 100 V	10 +/- 1 V
100 V <= U_R or U_C < 500 V	100 +/-15 V
500 V <= U_R or U_C	500 +/-50 V

2 AAE063-005 is prescribed by IEC for specific capacitor types. See also AAE069-005

AAE064-005 02 NR3..3.3ES2 E44
level max real measure
Ω

equivalent series resistance ESR
ESR

The maximum equivalent series resistance (in ohms) of an electrolytic capacitor at specified frequency and at the reference conditions.

NOTE
The ESR corresponds to the real part of the impedance.

AAE029-005 = frequency
AAE995-005 = reference conditions

AAE065-005 **03** **NR3..3.3ES2** **E44**
level nom real measure
1

tangent of loss angle **tan$d**
dissipation factor tan δ

The tangent of the loss angle of a capacitor at specified frequency and at reference conditions.

NOTE
The tangent of the loss angle is equal to the equivalent series resistance divided by the capacitive reactance.

AAE029-005 = frequency
AAE995-005 = reference conditions

REMARKS:
(IEC 60418-3 (1976)): The rotor should be set at minimum and maximum positions for the tan delta test on variable capacitors.
IEC requires the voltage to be specified.
N.B. Reciprocal of tan delta is quality factor Q.

AAE066-005 **01** **NR3..3.3ES2** **F02**
level min real measure
s

time constant (of capacitor) **RC**
RC product RC

The minimum product (in s) of the insulation resistance between terminals and the nominal capacitance of a fixed capacitor.

REMARKS:
According to IEC, this DE-type is used for the following groups of capacitors:

polycarbonate film	> 0.33 uF
polyethylene-terephthalate	> 0.33 uF
polypropylene film	> 0.33 uF
polypropylene film/foil	> 0.1 uF
polystyrene	> 0.1 uF
mica	> 0.01 uF
ceramic class 1	> 10 nF
ceramic class 2	> 25 nF
radio interference suppressors	> 0.33 uF

For lower values use R_{ins} (AAE063-005)

AAE067-005 **01** **NR3 S..3.3ES2** **H03**
level miNoMax real measure
K^{-1}

temperature coefficient (cap) **TC**
TC

The value as specified by level (miNoMax) of the temperature coefficient (in K^{-1}), relative to the nominal capacitance, of a fixed capacitor.

IEC 60384-1 (1999)

REMARKS:
The temperature coefficient of variable capacitors is measured at rotor settings and temperatures as given in IEC 60418-1 (1974).

AAE068-005 **01** **NR3..3.3ES2** **E09**
level miNoMax real measure
F

maximum capacitance **C_max**
C_{max}

The value as specified by level (miNoMax) of the maximum capacitance (in F) obtainable by moving the actuating device of a variable capacitor.

AAE069-005 **01** **NR3..3.3ES2** **E09**
level miNoMax real measure
F

minimum capacitance **C_min**
C_{min}

The value as specified by level (miNoMax) of the minimum capacitance (in F) obtainable by moving the actuating device of a variable capacitor.

AAE070-005 **01** **M..3** **A56**
simple non-quantitative code

adjustability class **adjustabl class**

Code of the adjustability class of a variable capacitor or potentiometer.

CTL = control (potentiometer)
PRE = preset
TRM = trimmer
TUN = tuning (capacitor)

AAE071-005 **02** **NR2 S..3.3** **E09**
level nom real measure
%

capacitance tolerance **C_tol**
C_{tol}

The nominal tolerance on capacitance (in %) identifying a capacitor.

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAE072-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal length **l_term**
l_{term}

The value as specified by level (miNoMax) of the length (in m) of the terminals of an electric-electronic or electromechanical component extending below the seating plane.

AAE073-005 **02** **NR1..4** **T07**
level nom integer measure
h

endurance **endurance**
endurance

The nominal duration of the endurance test (in h) according to IEC 60384-4 (1998) at the rated voltage (dc) and at specified ambient temperature, which a fixed electrolytic capacitor shall withstand.

AAE014-005 = ambient temperature

AAE074-005 **03** **M..8** **A56**
simple non-quantitative code

IC application field **IC appl field**

Code identifying the equipment in which an application oriented IC is used.

AO = application field
ARI = **traffic warning system
AUD = *audio
AUT = *automotive
CAM = **camera
CAR = **car radio
CD = **compact disc
CLWTCH = *clocks and watches
CREC = **camera recorder
DCOM = **data communications
DIAL = **dialler
DIS = **display
E/W = ***east/west correction
GAM = **games
GP = general purpose
HAID = **hearing aid
HOR = ****horizontal
MOB = ***mobile telephony
MTR = ***multi-tone ringer
PASY = **paging system
RC = **radio recorder
REC = **recorder
REM = **remote control
RR = **radio receiver
SPS = ***speech synthesizer
SYNC = ***synchronization
TCOM = *telecommunications
TEL = **telephony
TV = **television receiver
TXT = ***teletext
VCR = **recorder
V-DEFL = ***vertical deflection
VERT = ****vertical
VID = *video

AAE076-005 **02** **M..3** **A57**
simple string

dielectric subclass 2 **diel subclass2**

IEC standard code of the subclass of a fixed class2 ceramic capacitor, as determined by the temperature characteristic of capacitance.

IEC 60384-9 (1988)

REMARKS:
First (numeric) character is always 2 (see AAE038-005)
Second (alphabetic) character indicates maximum capacitance change in per cent with respect to C_R at 20 deg C:

	$U_{dc} = 0$	$U_{dc} = U_{R(dc)}$
B	+/-10	+10/-15
C	+/-20	+20/-30
D	+20/-30	+20/-40
E	+20/-56	+20/-70
F	+30/-80	+30/-90
R	+/-15	+15/-40
X	+/-15	+15/-25

Third (numeric) character indicates temperature range:

1	-55/+125 deg C
2	-55/+ 85 deg C
3	-40/+ 85 deg C
4	-25/+ 85 deg C
6	+10/+ 85 deg C

AAE077-005 **01** **X..3** **A56**
simple non-quantitative code

signal type **signal type**

Code identifying a function on an IC according to the type of signal being treated.

AD = AD (analogue/digital)
ANA = analogue
DIG = digital
PER = periodic/dc

AAE084-005 **03** **M..8** **A56**
simple non-quantitative code

analogue function **analog function**

Code identifying an analogue signal function of an IC.

AMP = amplifier
BDP = *band pass
COMP = comparator
DCC = *dc controlled
DEC = decoder
DEM = demodulator
DOLBY = **Dolby
ENC = encoder
FIL = filter
FS = *frequency synthesizer
MIX = *mixer
MOD = modulator
OPAMP = *operational
PREAMP = *preamplifier
PRESC = *prescaler
RED = *noise reduction
SUP = *interference suppression
TUN = tuner

AAE085-005 **01** **X..3** **A56**
simple non-quantitative code

digital function **dig function**

Code identifying a digital function of an IC.

CSI = CSI (combinatorial sequential interface)
MUC = microcontroller
MUP = microprocessor
PLD = PLD (programmable logic device)
STO = storage

AAE086-005 **02** **NR2 S..3.3** **E06**
level minMax real measure
V

supply voltage limit **V_sup**
dc supply voltage V_{sup}

The value as specified by level (minMax) of the limiting direct supply voltage (in V) applied to an IC.

REMARKS:
Commonly known supply voltage symbols:
V_{CC} for TTL, NMOS and HCMOS circuits
V_{DD} for CMOS circuits
V_P for analogue circuits
V_{EE} for ECL circuits

AAE092-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

HIGH-state output voltage V_OH
HIGH-level output voltage V_{OH}
output voltage HIGH

The value as specified by level (minTypMax) of the HIGH-state dc output voltage (in V) of a digital function of an IC, at specified supply voltage, output current, logic input voltages and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE226-005 = output current
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
It is required that the value of the logic input voltages falls within either the V_{IH} or the V_{IL} range.

AAE093-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

HIGH-state output voltage ref V_OHref
HIGH-level output voltage V_{OHref}
output voltage HIGH

The value as specified by level (minTypMax) of the guaranteed HIGH-state dc output voltage (in V) of a digital function of an IC, at reference input voltages, specified supply voltage and output current, and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE226-005 = output current
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
It is required that the value of the reference input voltages is either zero (GND/V_{SS}), or equal to the supply voltage (V_{CC}/V_{DD}).

AAE094-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

LOW-state output voltage ref V_OLref
LOW-level output voltage V_{OLref}
output voltage LOW

The value as specified by level (minTypMax) of the guaranteed LOW-state dc output voltage (in V) of a digital function of an IC, at reference input voltages, specified supply voltage and output current, and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE226-005 = output current
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
It is required that the value of the reference input voltages is either zero (GND/V_{SS}), or equal to the supply voltage (V_{CC}/V_{DD}).

AAE097-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

LOW-state output voltage V_OL
LOW-level output voltage V_{OL}

The value as specified by level (minTypMax) of the LOW-state dc output voltage (in V) of a digital function of an IC, at specified supply voltage, output current, logic input voltages and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE226-005 = output current
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
It is required that the value of the logic input voltages falls within either the V_{IH} or the V_{IL} range.

AAE102-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

supply voltage **@V_sup**
dc supply voltage @V_{sup}

The direct supply voltage (in V) applied to an IC, as a variable.

REMARKS:
Commonly known supply voltage symbols: V_{CC} for TTL, NMOS and HCMOS circuits V_{DD} for CMOS circuits V_P for analogue circuits V_{EE} for ECL circuits

AAE106-005 **03** **NR1..4** **Q56**
level nom integer measure
1

number of functions **N_func**
N_{func}

Number of identical functions of a multiple function component.

REMARKS:
Such as identical functions on one IC.

AAE111-005 **01** **M..3** **A53**
simple non-quantitative code

packing type **packing type**

Code of the packing type at specified packing level for products.

AMM = ammopack
BAG = bag
BLI = blister
BOX = box
CAS = cassette
CON = container
PAL = pallet
RAL = rail
RL = reel
TRA = tray

REMARKS:
This data element must be used in combination with AAF270-005 (packing level).

AAE112-005 **02** **M..3** **A53**
simple non-quantitative code

taping **taping**

Code of taping for automatic handling of products.

AX = axial (tape for axial leads)
BL = blister (tape for SMD)
CB = cardboard (tape for SMD)
RD = unidirectional (tape for radial leads)

AAE113-005 **01** **NR1..4** **H03**
level max integer measure
K^{-1}

temperature coefficient **$a**
α

The maximum reversible variation of the resistance (in K^{-1}) of a fixed linear resistor or a potentiometer.

IEC 60115-1 (1999)

AAE114-007 **01** **X..8** **A57**
simple non-quantitative code

linearity of a fixed resistor **linearity**

Code of linearity class to which a fixed resistor belongs.

LIN = linear
NLN = non-linear

AAE115-005 **01** **NR1..4** **H02**
level max integer measure
Cel

maximum surface temperature **T_surf**
maximum body temperature T_{surf}
hot spot temperature

The maximum surface temperature (in Cel) of a fixed resistor.

IEC 60115-1 (1999)

AAE116-005 **02** **M..8** **A57**
simple non-quantitative code

resistive material **resistive mat**
resistance element material

Code of the resistive material of a fixed linear or a variable resistor.

C = carbon
CEM = *cemented
CER = *ceramic (rectangular)
CERMET = ceramic/metal
EN = *enamelled
MGL = metal glaze
MTL = metal
WW = wirewound

REMARKS:
For potentiometers, the term cermet is used instead of metal glaze.
Cermet is an acronym for ceramic and metal. With this type, the resistive element is a metal glaze compound deposited on a ceramic substrate.

AAE118-005 **01** **NR1..4** **E06**
level max integer measure
V

limiting element voltage (dc) **U_max(dc)**
limiting voltage (dc) $U_{max(dc)}$

The maximum limiting dc voltage (in V) that may be applied to a resistor.

AAE119-005 **01** **NR3..3.3ES2** **E33**
level miNoMax real measure
Ω

resistance **R**
R
R_{ac}

The value as specified by level (miNoMax) of the resistance (in ohms) of a fixed linear resistor or variable resistor.

IEC 60115-1 (1999)

REMARKS:
The symbol R_{ac} is used for potentiometers. The value of R_{ac} is measured between the end terminals of potentiometers and between the end positions of two-terminal resistors.

AAE122-005 **01** **X..3** **A56**
simple non-quantitative code

resistance dependency **res dependency**

Code of the physical dependency to which a non-linear fixed resistor belongs.

LDR = light dependent resistor
TDR = thermistor (temperature)
VDR = varistor (voltage)

AAE123-005 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω

dark resistance **R_D**
R_D

The minimum value of the dark resistance (in ohms) of a light dependent resistor.

AAE124-005 **01** **NR3..3.3ES2** **E33**
level minMax real measure
Ω

light resistance **R_L**
R_L

The value as specified by level (minMax) of the light resistance (in ohms) of a light dependent resistor.

AAE125-005 **01** **NR2..3.3** **E01**
simple real measure
A

current (pulse) **@I_pul**
$@I_{pul}$

The peak value of a pulse current (in A) passed through an electric, electronic or electromechanical component, as a variable.

AAE126-005 **02** **X..3** **A56**
simple non-quantitative code

thermistor type **TDR type**

Code of the sign of the temperature coefficient belonging to a thermistor.

NTC = negative temperature coefficient
PTC = positive temperature coefficient

AAE127-005 **01** **NR3..3.3ES2** **E33**
level miNoMax real measure
Ω

resistance at 25 Cel **R_25**
R_{25}

The value as specified by level (miNoMax) of the resistance of a thermistor at an ambient temperature of 25 Cel.

AAE130-005 **01** **NR2..3.3** **H07**
level nom real measure
W/K

dissipation factor **$D**
Δ

The ratio of the power dissipation change to the resultant body temperature change (in W/K) of a thermistor at a specified ambient temperature.

AAE014-005 = ambient temperature

IEC 60539-1 (2002)

AAE131-005 **01** **NR2..3.3** **F02**
level nom real measure
s

thermal time constant **$t**
τ
τ_{th}

The nominal thermal time constant (in s) of a thermistor.

REMARKS:
IEC 60539-1 (2002)
The time required for the temperature of a thermistor to change by 63,2 % of the difference between its initial and final temperatures when subjected to a step function change in temperature under zero-power conditions.

AAE132-005 **02** **NR1..4** **H01**
level miNoMax integer measure
K

thermal sensitivity index B25/85 **B_25/85**
B_25/85 value $B_{25}/85$

The value as specified by level (miNoMax) of the mean temperature sensitivity index (in K) of an NTC thermistor between 25 and 85 Cel.

IEC 60539-1

AAE135-005 **02** **NR3..3.3ES2** **H15**
level nom real measure
J/K

heat capacity **C**
C
H

The nominal heat capacity (in J/K) of a PTC resistor or piezoelectric device.

ISO 31-4 (1992)

AAE136-005 **01** **NR3..3.3ES2** **E01**
level min real measure
A

trip current **I_t**
I_t

The minimum rms ac current (in A) that will trip a PTC thermistor from the low resistance region to the high resistance region, at specified ambient temperature.

AAE014-005 = ambient temperature

AAE137-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

non-trip current **I_nt**
I_{nt}

The maximum rms ac current (in A) at which a PTC thermistor will stay in the low resistance region, at specified ambient temperature.

AAE014-005 = ambient temperature

AAE138-005 **01** **NR1..4** **H02**
level nom integer measure
Cel

switching temperature **T_sw**
switch temperature T_{sw}

The nominal temperature (in Cel), under zero power conditions, at which the resistance value of a PTC thermistor is twice the R_{min} value.

AAE139-005 **01** **X..3** **A52**
simple non-quantitative code

number of terminals **number of term**

Code of the number of terminals identifying a variable resistor.

POT = potentiometer (3 or more terminals)
TT = two-terminal variable resistor

AAE141-005 **01** **M..8** **A52**
simple non-quantitative code

resistance law (IEC) **resistance law**

IEC code of the resistance law of a potentiometer.

law-A = linear law
law-B = logarithmic law
law-C = inverse logarithmic law

REMARKS:
The relationship of the measured resistance value between terminations a and b or of the output ratio U_{ab}/U_{ac} to the mechanical position of the moving contact.

AAE142-005 **01** **M..3** **A52**
simple non-quantitative code

actuator type **actuator type**
moving contact actuator type

Code of the moving contact actuator type of a potentiometer.

ROT = rotary
SLD = slide

AAE144-005 **01** **M..3** **A58**
simple non-quantitative code

mounting position **mtg position**

Code of the (intended) mounting position of a potentiometer with printed wiring pins.

HOR = horizontal version
VER = vertical version

AAE145-005 **02** **M..3** **A57**
simple non-quantitative code

spindle material of potentiometer **spindle mat**
spindle material

Code of the spindle material of a rotary potentiometer.

MTL = metal
PLA = plastic

AAE146-005 **01** **NR1..4** **E06**
level max integer measure
dB

ganging tolerance **ganging tol**
ganging tol

The maximum ganging tolerance (in dB) of a tandem potentiometer.

AAE147-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

spindle length **l_spin**
l_{spin}

The nominal length (in m) of the spindle of a rotary potentiometer.

REMARKS:
The spindle length is measured with reference to the mounting surface of the potentiometer.

AAE148-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

spindle diameter **d_spin**
d_{spin}

The nominal diameter (in m) of the spindle of a rotary potentiometer.

AAE149-005 **02** **M..17** **A59**
simple non-quantitative code

safety approval **safety approval**

The abbreviated name of the office which has approved the safety of an electric, electronic or electromechanical component.

BEAB(BSI) = British Electrical Approvals Board
CEBEC = Comite Electrotechnique Belge (Belgium)
CSA = Canadian Standards Association
DEMKO = Danmarks Elektriske Materiellkontrol
EI = Elektriska Inspektorated (Finland)
HHS = Health and human services (USA)
JIS = Japanese Industrial Standards (Committee)
KEMA = Keuring van Elektrotechnische Materialen
LCIE = Laboratoire Central Industries Electrique
MED = Medizin Geraete Verordnung (West Germany)
NEMKO = Norges Elektriske Materiellkontrol (Norway)
OEVE = Oesterreichischer Elektrotechnischer Verein
ROV = Rontgen Verordnung (West Germany)
SEMKO = Svenska Elektriska Materielkontrollanstalten
SEV = Schweizerischer Elektrotechnischer Verein
UL = Underwriters' Laboratories Inc. (USA)
VDE = Verband Deutscher Elektrotechnischer Verein

AAE150-005 **01** **NR3..3.3ES2** **E06**
simple real measure
V

voltage (ac) **@U_ac**
$@U_{ac}$

The rms sinusoidal voltage (in V) applied to an electric, electronic or electromechanical component, as a variable.

AAE151-005 **01** **M..8** **A52**
simple non-quantitative code

winding configuration **winding config**
separation

Code of the winding configuration of a transformer or inductive antenna.

AUTO = auto
SEPRT = separate

AAE152-005 **01** **X..3** **A56**
simple non-quantitative code

power/signal **power/signal**

Code of the application of a transformer or cable.

POW = power
SIG = signal

AAE155-005 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω

insulation resistance **R_ins**
R_{ins}

The minimum insulation resistance (in ohms) between the live and non-live parts of a switch, relay, transformer or connector.

IEC 60068 (1969)

REMARKS:
IEC 60742 (1983)
The insulation resistance is measured with dc voltage of approximately 500 V applied, the measurement being made 1 min after application of the voltage.

AAE156-005 **01** **NR3..3.3ES2** **F03**
level nom real measure
Hz

upper frequency **f_upr**
f_{upr}

The nominal upper frequency (in Hz) of a signal transformer.

AAE157-005 **01** **NR1..4** **F03**
level nom integer measure
Hz

lower frequency **f_low**
f_{low}

The nominal lower frequency (in Hz) of a signal transformer.

AAE158-005 **01** **NR3..3.3ES2** **T03**
level min real measure
m

clearance to earth **clearance**
spark gap clearance
spark distance

The minimum clearance to earth (in m) of a power transformer.

IEC 60050 (441) (1984)

AAE159-005 **01** **NR3..3.3ES2** **T03**
level min real measure
m

creepage distance **d_crpg**
leakage path d_{crpg}

The minimum creepage distance (in m) between live and non-live parts of a power transformer or connector.

IEC 60742 (1983)

AAE160-005 **01** **NR1 S..4** **E01**
level nom integer measure
A

nominal output current **I_out**
I_{out}

The nominal output current (in A) of a power transformer, at nominal input voltage and nominal frequency.

IEC 60742 (1983)

REMARKS:
For variable power transformers, the nominal output current is valid over the whole range.

AAE163-005 **01** **NR1..4** **E06**
level miNoMax integer measure
V

input voltage **U_in**
supply voltage U_{in}

The value as specified by level (miNoMax) of the rms sinusoidal input voltage (in V) of a power transformer.

REMARKS:
IEC 60742 (1983):
For polyphase supply, the line voltage is intended.

AAE164-005 **01** **NR1..4** **E06**
level max integer measure
V

no-load output voltage **U_out(open)**
$U_{out(open)}$

The maximum rms no-load output voltage (in V) at nominal input voltage and at nominal frequency.

IEC 60742 (1983)

AAE165-005 **02** **NR3..3.3ES2** **E49**
level nom real measure
VA

output power **P_out**
P_{out}

The nominal rms power (in VA) of a power transformer.

IEC 60076-1 (1976)

AAE166-005 **01** **NR3..3.3ES2** **F03**
level miNoMax real measure
Hz

operating frequency **f_oper**
f_{oper}

The value as specified by level (miNoMax) of the frequency (in Hz) of a power transformer.

IEC 60076-1 (1976)

AAE167-005 **02** **M..3** **A56**
simple non-quantitative code

transformer model **tfm model**

Code of the model of a variable power transformer.

BNC = bench (protective housing)
LBR = *laboratory(bench model with handle, cable, fuse)
PNL = panel (not protected live parts)

AAE168-005 **01** **NR1..4** **E01**
level max integer measure
A

maximum output current **I_out**
continuous overload I_{out}

The maximum continuous sinusoidal rms output current (in A) in the most favourable brush position of a variable power transformer at nominal input voltage and nominal frequency.

AAE169-005 **02** **NR1..4** **E06**
level nom integer measure
V

output voltage **U_out**
U_{out}

The nominal rms sinusoidal output voltage (in V) at total rotation angle of a variable power transformer.

IEC 60186 (1987)

AAE170-005 **02** **NR3..3.3ES2** **Q59**
level min real measure
1

brush life **N_turn**
N_{turn}

The minimum guaranteed number of two-way turns of the brush of a variable power transformer.

NOTE
After the test the contact resistance shall be within its tolerance.

AAE171-005 **02** **NR3..3.3ES2** **Q59**
level min real measure
1

brush life expectation **N_turn(exp)**
$N_{turn(exp)}$

The minimum expectation of the number of two-way turns of the brush of a variable power transformer.

AAE172-005 **02** **NR1..4** **Q56**
level nom integer measure
1

ganging number **N_gang**
number of variable elements N_{gang}

The number of variable elements (capacitors, resistors, power transformers) with a common actuating device.

AAE173-005 **01** **NR1..4** **T01**
level nom integer measure
deg

total mechanical rotation **$a_rot**
angle of mechanical rotation α_{rot}

The nominal angle of the total rotation (in deg) of the moving contact actuator of a rotary potentiometer or a variable power transformer.

AAE174-005 **01** **M..3** **A51**
simple non-quantitative code

magnet type **magnet type**
magnetisation system
magnet material

Code of the magnet type of the iron armature of a motor.

ELM = electromagnet
HBD = hybrid
NOM = no magnet
PMM = permanent magnet

AAE175-005 **01** **M..3** **A51**
simple non-quantitative code

coil connection **coil connection**

Code of the coil connection of a motor.

CMP = compound
SHP = shunt (parallel)
SRS = series

AAE176-005 **01** **M..3** **A51**
simple non-quantitative code

armature material **armature mat**

Code of the type of material of the armature of a motor.

IRL = iron-less
IRN = iron

AAE177-005 **03** **M..8** **A51**
simple non-quantitative code

integrated component **integr comp**

Code indicating a component integrated with a motor or relay.

BRAKE = brake
EBRAKE = *brake electromagnetic
ENCOD = encoder
GEAR = gearbox
LGEAR = *gearbox linear
MBRAKE = *brake mechanical
PBRAKE = *brake permanent magnetic
PINION = pinion
RGEAR = *gearbox rotational
SPARKS = spark suppressor
TACHO = tachogenerator

AAE178-005 **01** **X..3** **A52**
simple non-quantitative code

supply current type **I_sup type**

Code of the supply current type for which a motor has been designed.

AC = ac
DC = dc
STP = stepping motor (pulse)
UNI = universal motor (ac or dc)

AAE179-005 **01** **X..3** **A52**
simple non-quantitative code

trajectory of motion **trajectory**

Code of the trajectory of motion of the armature of a motor.

LIN = linear
ROT = rotational

AAE180-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V/(r/min)

electromotive force **E**
E

The nominal rated induced voltage in V/(r/min) in the winding of a motor as a result of the magnetic field and the motion.

IEC 60050 (131) (2002)

AAE182-005 **02** **NR3..3.3ES2** **E49**
level nom real measure
W

input power **P_in**
P_{in}

The nominal electric power (in W) supplied to a motor.

IEC 60050 (151) (2001)

AAE183-005 **02** **M..8** **A52**
simple non-quantitative code

ac motor synchronism **motor syn**

Code indicating the synchronism of an ac motor.

ASYN = asynchronous
SREL = *reluctance
SYN = synchronous

AAE184-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V

rated input voltage (ac) **U_ac**
driving voltage U_{ac}

The nominal rms alternating voltage (in V) at the terminals of an ac motor.

NOTE
For polyphase supply, the line voltage is intended.

IEC 60034-1 (2004)

AAE186-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V

rated input voltage (dc) **U_dc**
U_{dc}

The nominal direct voltage (in V) at the terminals of a dc motor.

IEC 60034 (1983)

AAE187-005 **01** **NR3..3.3ES2** **F02**
level min real measure
s

mechanical time constant **$t**
τ

The minimum value of the time (in s) an unloaded dc motor needs, starting from rest, to reach 63 % of the unloaded speed at the rated input voltage.

AAE188-005 **02** **M..3** **A56**
simple non-quantitative code

direction of rotation **dir rot**

Code of the direction of rotation as seen from the spindle of a rotational motor.

CCW = anti-clockwise (counter-clockwise)
CW = clockwise
REV = reversible

REMARKS:
The sense of rotation when looking along the shaft from the drive end of the motor towards the non-drive end.

AAE189-005 **03** **NR3..3.3ES2** **K07**
level nom real measure
$kg.m^2$

rotor inertia **I**
I
J

The nominal rotor moment of inertia (in $kg.m^2$) of a rotational motor.

AAE190-005 **02** **NR2..3.3** **K09**
level max real measure
N

maximum radial force **F_rad**
F_{rad}

The maximum radial force (in N) on the spindle of a motor.

AAE191-005 **02** **NR3..3.3ES2** **K12**
level nom real measure
N.m

rated torque **T_rat**
max working torque T_{rat}
max load torque

The nominal torque (in N.m) of a rotational motor.

IEC 60050 (411) (1996)

AAE192-005 **02** **NR3..3.3ES2** **K12**
simple real measure
N.m

torque **@T**
@T

Torque (in N.m) of a rotational motor, as a variable.

AAE193-005 **01** **NR3..3.3ES2** **F03**
simple real measure
r/min

speed **@v**
@v

Speed (in r/min) of a rotational motor, as a variable.

AAE194-005 **01** **NR1..4** **F03**
level nom integer measure
r/min

synchronous speed **v_syn**
v_{syn}

The nominal speed of rotation (in r/min) of a synchronous rotational ac motor.

NOTE
This is a result of the system to which the machine is connected and either the number of poles or the number of projections in the machine, at a given (fixed) frequency.

IEC 60050 (411)(1996)

AAE195-005 **01** **NR3..3.3ES2** **F03**
level nom real measure
r/min

rated speed **v_rat**
v_{rat}

The nominal speed (in r/min) of a rotational ac asynchronous or dc motor at the rated input voltage and rated torque.

AAE196-005 **02** **NR3..3.3ES2** **K12**
level min real measure
N.m

starting torque **T_strt**
T_{strt}

The minimum starting torque (in N.m) which a rotational ac motor develops with the rated input voltage-ac applied.

NOTE
For capacitor motors, the capacitance has to be specified.

IEC 60050 (411) (1996)

AAE197-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A

rated input current **I**
I

The nominal direct input current (in A) of a rotational dc motor at rated input voltage and at rated working torque.

AAE199-005 **02** **NR3..3.3ES2** **K12**
level min real measure
N.m

starting torque **T_strt**
T_{strt}

The minimum starting torque (in N.m) which a rotational dc motor develops with the rated input voltage (dc) applied.

IEC 60050 (411) (1996)

AAE200-005 **02** **NR2..3.3** **K09**
level max real measure
N

maximum axial force **F_ax**
F_{ax}

The maximum axial force (in N) on the spindle of a rotational motor.

NOTE
Axial means in line with the shaft (pull or push).

AAE201-005 **02** **NR2..3.3** **K12**
level max real measure
N.m

pull-out torque **T_pull-out**
breakdown torque $T_{pull\text{-}out}$
maximum work torque

The maximum torque (in N.m) that a rotational stepping motor can develop while running at a given stepping rate without losing steps.

AAE209-005 = stepping rate

IEC 60050 (411) (1996)

AAE202-005 **02** **NR3..3.3ES2** **K12**
level max real measure
N.m

pull-in torque **T_pull-in**
max pull-in $T_{pull\text{-}in}$

The maximum torque (in N.m) that a rotational stepping motor can develop when starting at a given stepping rate without losing steps.

AAE209-005 = stepping rate

IEC 60050 (411) (1996)

AAE203-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A

current per phase **I_ph**
I_{ph}

The nominal rms input current (in A) of a linear stepping motor.

AAE204-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V

rated input voltage (pulse) **U_pul**
U_{pul}

The nominal pulse voltage (in V) at the terminals of a stepping motor.

IEC 60034-1 (2004)

AAE205-005 **01** **NR1..4** **F03**
level max integer measure
step/s

pull-in rate **pull-in rate**
pull-in rate

The maximum switching rate (in step/s) at which an unloaded stepping motor can start without losing steps.

AAE206-005 **01** **NR1..4** **F03**
level max integer measure
step/s

pull-out rate **pull-out rate**
pull-out rate

The maximum switching rate (in step/s) which an unloaded stepping motor can follow without losing steps.

AAE207-005 **02** **NR3..3.3ES2** **K12**
level max real measure
N.m

holding torque **T_hold**
T_{hold}

The maximum steady torque (in N.m) that can be externally applied to the spindle of an excited motor without causing continuous rotation.

AAE208-005 **01** **NR1 S..4** **T01**
level nom integer measure
deg

step angle **$a_step**
α_{step}

The nominal angle (in deg) between adjacent step positions of a stepping motor or a mechanical rotary switch.

AAE209-005 **02** **NR3..3.3ES2** **F03**
simple real measure
step/s

stepping rate **@step rate**
@step rate

Number of steps/s of a rotational stepping motor, as a variable.

AAE210-005 **02** **NR2 S..3.3** **E06**
level minMax real measure
V

input voltage limit **V_Ilim**
V_{Ilim}

The value as specified by level (minMax) of the limiting direct input voltage (in V) applied to an IC.

AAE212-005 **01** **NR3..3.3ES2** **E33**
simple real measure
Ω

load resistance **@R_L**
@R_L

Load resistance (in ohms) at the output of an electric, electronic or electromechanical component, as a variable.

AAE214-005 **02** **NR2..3.3** **H07**
level max real measure
W

power dissipation per output **P/out**
dc power dissipation/output P/out

The maximum permissible power dissipation per output (in W) of an IC at specified ambient temperature.

AAE014-005 = ambient temperature

AAE217-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

input current limit **I_Ilim**
dc input diode current I_{Ilim}
input clamping current I_{INlim}
I_{IKlim}

The maximum limiting dc input current (in A) of a digital function of an IC.

REMARKS:
For ICs containing protection diodes, clamping occurs when the applied input voltage exceeds the supply voltage, or drops below GND or V_{SS} level.

AAE218-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

output current limit **I_Olim**
dc output diode current I_{Olim}
output clamping current I_{OKlim}

The maximum limiting dc output current (in A) of a digital function of an IC.

REMARKS:
For ICs containing protection diodes, clamping occurs when the applied output voltage exceeds the supply voltage, or drops below GND or V_{SS} level.

AAE223-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

input leakage current **I_I**
I_I
I_{IN}

The maximum guaranteed input leakage current (in A) of a digital function of an IC, at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
Required input condition (V_I):
For CMOS and HCMOS, zero (GND/V_{SS}) or supply voltage (V_{CC}/V_{DD}).
For TTL, only valid for an input voltage equal to V_{CC}.

AAE224-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

input voltage **@V_I**
@V_I

The dc input voltage (in V) of an IC, as a variable.

AAE225-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

rise time **@t_r**
@t_r

The rise time (in s) of a step function change (10% to 90%) of a signal applied to an electric-electronic or electromechanical component, as a variable.

AAE226-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

output current **@I_O**
@I_O

The dc output current (in A) of an IC, as a variable.

AAE228-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

output voltage **@V_o(dc)**
@$V_{o(dc)}$

The dc output voltage (in V) of an IC, as a variable.

AAE231-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

propagation delay **t_PD**
delay time t_{PD}

The value as specified by level (minTypMax) of the propagation delay time (in s) of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAE233-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

HIGH to LOW propagation time **t_PHL**
HIGH to LOW delay time t_{PHL}

The value as specified by level (minTypMax) of the HIGH to LOW propagation time (in s) of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAE235-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

output fall time **t_f**
HIGH to LOW transition time t_f
switching time t_{THL}

The maximum guaranteed HIGH-level to LOW-level transition time (in s) at the output of a digital function of an IC at specified load capacitance, supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE256-005 = load capacitance
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
The voltage level specified for the beginning of the slope is 10 %, that for the end of the slope is 90 %.

AAE237-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

LOW to HIGH propagation time **t_PLH**
LOW to HIGH delay time t_{PLH}

The value as specified by level (minTypMax) of the LOW to HIGH propagation time (in s) of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAE238-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

output rise time **t_r**
LOW to HIGH transition time t_r
switching time t_{TLH}

The maximum guaranteed LOW-level to HIGH-level transition time (in s) at the output of a digital function of an IC at specified output capacitance, supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE256-005 = load capacitance
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
The voltage level specified for the beginning of the slope is 10 %, that for the end of the slope is 90 %.

AAE239-005 **03** **NR3 S..3.3ES2** **E01**
level max real measure
A

HIGH off-state output current **I_OZH**
3-state output leakage current I_{OZH}
off-state current I_{OZ}

The maximum guaranteed HIGH off-state dc output current (in A), of a 3-state digital function of an IC, at the maximum supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
Applies to digital ICs with 3-state outputs.
It is assumed that the required external HIGH-state output voltage (V_{OH} or V_{CC} or V_{DD}) is applied, as well as the appropriate input condition (V_{IL} and/or V_{IH}).

AAE240-005 **03** **NR3 S..3.3ES2** **E01**
level max real measure
A

LOW off-state output current **I_OZL**
3-state output leakage current I_{OZL}
off-state current I_{OZ}

The maximum guaranteed LOW off-state dc output current (in A), of a 3-state digital function of an IC, at maximum supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
Applies to digital ICs with 3-state outputs.
It is assumed that the required external LOW-state output voltage (V_{OL} or V_{SS} or GND) is applied, as well as the appropriate input condition (V_{IL} and/or V_{IH}).

AAE254-005 **02** **NR3 S..3.3ES2** **E01**
level min real measure
A

LOW-state output current **I_OL**
LOW-level output current I_{OL}
output sink current

The minimum guaranteed LOW-state dc output current (in A) of a digital function of an IC, at specified supply voltage, output voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE228-005 = output voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
Refers to the minimum current sinking capacity of the output of a digital IC, at which a specified output voltage (V_{OL}) is still maintained, while the inputs are either at zero (GND/V_{SS}) or at supply voltage level (V_{CC}/V_{DD}).

AAE255-005 **02** **NR3 S..3.3ES2** **E01**
level min real measure
A

HIGH-state output current **I_OH**
HIGH-level output current I_{OH}
output source current

The minimum guaranteed HIGH-state dc output current (in A) of a digital function of an IC, at specified supply voltage, output voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE228-005 = output voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

REMARKS:
Refers to the minimum current sourcing capacity of the output of a digital IC, at which a specified output voltage (V_{OH}) is still maintained, while the inputs are either at zero (GND/V_{SS}) or at supply voltage level (V_{CC}/V_{DD}).

AAE256-005 **01** **NR3..3.3ES2** **E09**
simple real measure
F

load capacitance **@C_L**
@C_L

Load capacitance (in F) at the output of an electric, electronic or electromechanical component, as a variable.

AAE257-005 **01** **NR2..3.3** **H07**
level max real measure
W

power dissipation **P**
P

The maximum power (in W) of an electric-electronic or electromechanical component which may be dissipated continuously at specified temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature

AAE259-005 **01** **M..8** **A58**
simple non-quantitative code

shape/size code BSI **shape/size**

BSI code of the shape/size of an electric-electronic or electromechanical component for placement on printed circuits.

BR = bead package, two radial leads
CS = cylindrical package, single-ended, two leads
CT = cylindrical package, stud mounting
DA = disc package, two axial leads
DD = disc package, double tag
DL = dual in-line package, multi-lead
DP = disc package, printed circuit board mounting
DR = disc package, two radial leads
DS = disc package, stud mounting
DT = disc package, potting tag
FP = flat pack, multi-lead
PA = potentiometer, panel mounting
PB = potentiometer, panel mounting
PC = potentiometer, panel mounting
PD = potentiometer, panel mounting
PE = potentiometer, panel mounting
PF = potentiometer, panel mounting
PP = rectangular package, three leads, horizontal adjuster
PQ = rectangular package, three leads, vertical adjuster
RA = rectangular package, two axial leads
RC = rectangular package, metallised ends (SMD)
RR = rectangular package, two radial leads
RS = rectangular package, two strip leads
TA = tubular package, two axial leads
TR = tubular package, two radial leads
XA = oval package, two mounting holes, two leads
XB = stud-mounted package, one fixed tag
XC = cylindrical metal-can package, multi-lead
XD = top-hat package, axial leads
XE = stud-mounted package, two fixed tags
XF = stud-mounted package, one flexible lead with tag
XG = stud-mounted package, two flexible leads with tag
XH = stud-mounted package, one flexible lead
XK = flat package, three in-line leads
XL = near-cylindrical package, three leads on circle
XM = flat package, mounting hole, two/three leads
XN = flat package, three pre-formed leads
XP = moulded case, three mounting feet
XR = flat package with flange, mounting hole, 2/3 leads

BS 6943 (1988)

REMARKS:
The complete code consists of three parts:
a) a two-letter drawing code, followed by

b) a numeric code giving a salient property, which may be either a major dimension or the number of leads, followed by
c) a hyphen and a serial number to distinguish components with the same drawing and numeric codes.

For reference drawings see source document.

AAE260-005 **02** **NR1 S..4** **H02**
simple integer measure
Cel

case temperature **@T_case**
surface temperature @T_{case}

The case temperature (in Cel) of a component, as a variable.

IEC 60068-1 (1988)

AAE262-005 **01** **M..8** **A55**
simple non-quantitative code

encapsulation technology **encapsulation**

Code indicating the encapsulation technology which has been applied in an electric, electronic or electromechanical component.

LACQ = lacquered
MOULD = moulded
POTTED = potted
SEAL = sealed coat
SLEEVE = sleeved
WRAP = wrapped end-filled

AAE263-005 **01** **M..8** **A56**
simple non-quantitative code

polarity type **polarity**

Code of the type of polarity of a fixed electrolytic capacitor indicating whether it is designed for unidirectional or alternating/reversible voltages.

BIPOL = bipolar: for ac voltages and/or reversible dc voltages
POLAR = polar: for unidirectional voltages

AAE266-005 **03** **M..3** **A57**
simple non-quantitative code

dielectric subclass 1 **diel subclass1**

IEC standard code of the subclass of a fixed class1 ceramic capacitor, as determined by the temperature coefficient and its tolerance.

1A = 1A
1B = 1B
1C = 1C
1D = 1D
1F = 1F

IEC 60384-8 (1988)

REMARKS:
First (numeric) character is always 1 (see AAE038-005)
Second (alphabetic) character indicates tolerance on temperature coefficient of capacitance:

sub-class code	A	B	F	C	D
temp. coeff. ($10^{-6/K}$)	Tolerance on temperature Coefficient ($10^{-6/K}$)				
+100 to -220	+/-15	+/- 30			
-330 to -470	+/-30	+/- 60			
-750 to -1000	+/-60	+/-120	+/- 250		
-1500			+/- 250		
-2200 to -3300			+/- 500		
-4700			+/-1000		
-5600			+/-1000		
+140 >TC> -1000				C	
+250 >TC> -1750					D

For the meaning of the values, see table II of IEC 60384-8 (1988).

AAE267-005 **01** **NR1..4** **H02**
level max integer measure
Cel

rated temperature **T_rat**
T_{rat}

The maximum temperature (in Cel) at which a defined set of rated values apply simultaneously for an electric, electronic or electromechanical component.

NOTE
Generally referring to currents, voltages, and/or power.

AAE268-001 **01** **NR3 S..3.3ES2** **E09**
level nom real measure
%

capacitance upper tolerance **C_ut**
C_{ut}

The upper tolerance (in F) of the rated capacitance of a fixed capacitor.

AAE269-001 **01** **NR3 S..3.3ES2** **E09**
level nom real measure
%

capacitance lower tolerance **C_lt**
C_{lt}

The lower tolerance (in F) of the rated capacitance of a fixed capacitor.

AAE271-005 **01** **NR1..4** **H02**
simple integer measure
Cel

junction temperature **@T_j**
virtual junction temperature $@T_j$

The junction temperature (in Cel) of a transistor, diode, trigger device, optoelectronic device or IC as a variable.

IEC 60747-1, amendment 3 (1996)

AAE272-005 **01** **NR1..4** **H02**
simple integer measure
Cel

mounting base temperature **@T_mb**
$@T_{mb}$

The temperature (in Cel) of the mounting base of a transistor, diode, trigger device, optoelectronic device or IC, as a variable.

JESD 77B (2000)

AAE273-007 **01** **X..8** **A56**
simple non-quantitative code

diode application **diode appl**

Code of the type of application of a diode.

BOD = breakover diode
REC = rectifier diode
SIGD = signal diode
STB = stabilizer diode
VARD = variable capacitance diode

AAE274-005 **02** **NR3..3.3ES2** **E01**
simple real measure
A

forward current **@I_F**
$@I_F$

The direct current (in A) flowing through a diode or diode part of an electronic device, in the forward direction, as a variable.

IEC 60747-2 (1983)

AAE275-005 **01** **NR3..3.3ES2** **E01**
simple real measure
A/s

rate change of forward current **@dI_F/dt**
$@dI_F/dt$

The rate of change of forward current (in A/s) of a diode, as a variable.

AAE276-005 **03** **NR3..3.3ES2** **E01**
level max real measure
A

reverse current **I_R**
continuous direct reverse current I_R

The maximum continuous reverse direct current (in A) of a diode, optoelectronic device, thyristor or triac at specified reverse voltage and temperature of a temperature type.

AAE335-005 = reverse voltage
AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60747-2 (2000)

AAE277-005 **02** **NR2..3.3** **E06**
level max real measure
V

reverse voltage **V_R**
stand-off voltage V_R

The maximum voltage (in V) which may be applied continuously to a diode or diode part of an optoelectronic device in the reverse direction at specified temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60747-2 (2000)

AAE279-005 **02** **NR2..3.3** **E06**
level minTypMax real measure
V

forward voltage **V_F**
on-state voltage V_F

The value as specified by level (minTypMax) of the forward voltage (in V) across a diode or diode part of an optoelectronic device, at specified forward current and temperature of a temperature type.

AAE274-005 = forward current
AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60747-2 (2000)

AAE281-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

reverse recovery time **t_rr**
t_{rr}

The maximum reverse recovery time (in s) of a diode, when switched from a specified forward current to a specified reverse voltage at a specified change of forward current and junction temperature.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE275-005 = rate change of forward current
AAE335-005 = reverse voltage

IEC 60747-2 (2000)

AAE282-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

output current EHT supply **I_O(EHT)**
$I_{O(EHT)}$

The maximum output current (in A) at the EHT supply output of a voltage multiplier.

AAE283-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

output current focus supply **I_Ofoc**
I_{Ofoc}

The maximum output current (in A) at the focus supply output of a voltage multiplier.

AAE284-005 **03** **NR2..3.3** **E01**
level max real measure
A

peak inrush current limit **I_IIMlim**
I_{IIMlim}

The maximum limiting peak inrush current (in A) of a bridge rectifier.

AAE285-005 **03** **NR2..3.3** **E01**
level max real measure
A

non-rep peak input current limit **I_ISMlim**
I_{ISMlim}

The maximum limiting non-repetitive peak input current (in A) flowing through a bridge rectifier.

AAE286-005 01 NR2..3.3 E01
level max real measure
A

average output current I_O(AV)
$I_{O(AV)}$

The maximum average output current (in A) of a bridge rectifier at specified maximum mounting base temperature.

AAE287-005 01 NR2..3.3 E01
level max real measure
A

repetitive peak output current I_ORM
I_{ORM}

The maximum repetitive peak output current (in A) of a bridge rectifier.

AAE288-005 02 NR3..3.3ES2 E06
level max real measure
V

input voltage peak-to-peak V_in(p-p)
$V_{in(p-p)}$

The maximum peak-to-peak input voltage (in V) of a voltage multiplier.

AAE289-005 02 NR3..3.3ES2 E06
level max real measure
V

output voltage EHT supply V_O(EHT)
$V_{O(EHT)}$

The maximum output voltage (in V) at the EHT output of a voltage multiplier.

AAE290-005 02 NR1..4 E06
level max integer measure
V

repetitive peak input voltage V_IRM
V_{IRM}

The maximum repetitive peak input voltage (in V) of a bridge rectifier or voltage multiplier.

AAE291-005 01 NR1..4 E06
level max integer measure
V

rms input voltage V_I(RMS)
$V_{I(RMS)}$

The maximum rms input voltage (in V) of a bridge rectifier.

AAE292-005 01 NR1..4 E06
level max integer measure
V

crest working input voltage V_IWM
V_{IWM}

The maximum peak input voltage (in V) of a bridge rectifier.

NOTE
Excluding all repetitive and non-repetitive transient voltages.

AAE293-005 03 NR3..3.3ES2 E01
level max real measure
A

repetitive peak forward current I_FRM
I_{FRM}

The maximum repetitive peak forward current (in A) flowing through a diode or diac at specified forward voltage.

NOTE
Including all repetitive transient currents.

AAE499-005 = forward voltage

IEC 60747-2 (2000)

AAE294-005 01 NR1..4 E01
level max integer measure
A

non-repetitive peak forward current I_FSM
I_{FSM}

The maximum non-repetitive peak forward current (in A) of a diode at specified junction temperature and specified duration prior to the application of the pulse.

AAE028-005 = duration
AAE271-005 = junction temperature

IEC 60747-2 (2000)

REMARKS:
Half-sinewave duration is 10 ms.

AAE296-005 02 NR1..4 E01
level max integer measure
A

working peak forward current I_FWM
I_{FWM}

The maximum working peak forward current (in A) of an efficiency diode.

AAE297-005 **02** **NR3..3.3ES2** **E01**
level max real measure
A

repetitive peak reverse current **I_RRM**
repetitive peak recovery current I_{RRM}

The maximum repetitive peak reverse current (in A) of a rectifier diode when switched from a specified forward current to a specified reverse voltage at a specified rate of change of forward current and junction temperature.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE275-005 = rate change of forward current
AAE335-005 = reverse voltage

AAE298-005 **02** **NR2..3.3** **E01**
level max real measure
A

non-rep varistor peak current **I_nrp**
non-repetitive surge current I_{nrp}
non-repetitive transient current

The maximum limiting non-repetitive value of a pulse current (in A) through a varistor, with specified virtual front time and virtual time to half-value.

AAE125-005 = current (pulse)
AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value

AAE299-005 **01** **NR1..4** **E06**
level max integer measure
V

crest working reverse voltage **V_RWM**
working reverse voltage V_{RWM}

The maximum peak reverse voltage (in V), across a rectifier diode.

NOTE
Excluding all repetitive and non-repetitive transient voltages.

IEC 60747-2 (2000)

AAE300-005 **02** **NR1..4** **E06**
level max integer measure
V

repetitive peak reverse voltage **V_RRM**
V_{RRM}

The maximum repetitive peak reverse voltage (in V) across a diode or reverse blocking thyristor.

IEC 60747-2 (2000)

AAE301-005 **03** **NR1..4** **E06**
level max integer measure
V

non-repetitive peak reverse voltage **V_RSM**
V_{RSM}

The maximum non-repetitive peak reverse voltage (in V) of a rectifier diode or signal diode.

IEC 60747-2 (2000)

REMARKS:
NOTE
The repetitive voltage is usually a function of the circuit and increases the power dissipation of the device. A non-repetitive transient voltage is usually due to an external cause and it is assumed that its effect has completely disappeared before the next transient arrives.

AAE302-005 **02** **NR2..3.3** **H07**
level max real measure
W

repetitive peak reverse power **P_RRM**
P_{RRM}

The maximum amplitude (in W) of a repetitive square power pulse dissipated in an avalanche rectifier diode or signal diode, operating in the breakdown region, at specified duration, frequency and junction temperature.

NOTE
For some types of avalanche diodes, V_{RRM} is specified instead of $P_{RRM.}$

AAE028-005 = duration
AAE029-005 = frequency
AAE271-005 = junction temperature

AAE303-006 **01** **NR2..3.3** **H07**
level max real measure
W

non-rep peak reverse power diss **P_RSM**
P_{RSM}
P_{ZSM}

The maximum amplitude (in W) of a single non-repetitive square pulse dissipated in a rectifier or signal diode, at specified pulse duration and junction temperature prior to the application of the pulse.

AAE028-005 = duration
AAE271-005 = junction temperature

AAE304-005 **03** **NR3..3.3ES2** **H20**
level max real measure
J

non-rep peak rev avalanche energy **E_RSM**
E_{RSM}

The maximum non-repetitive peak reverse avalanche mode pulse energy (in J) of a rectifier diode, at specified reverse current and maximum junction temperature prior to the application of the pulse and with inductive load switched off.

AAE994-005 = reverse current

NOTE
E_{RSM} can also be calculated from P_{RSM}.

AAE305-005 **01** **NR2 S..3.3** **H06**
level max real measure
J

Joule-integral **(I**2)*t**
I squared t for fusing I^2t

The maximum capability of a thyristor, triac or diode to absorb energy (in J) at specified time duration.

NOTE
When considered from the point of view of the circuit protected by a fuse, the value of the Joule-integral over the operating time of the fuse is referred to as specific energy, i.e. the energy released as heat in 1 Ω of circuit resistance.

AAE028-005 = duration

IEC 60050-441, amendment 1 (2000)

REMARKS:
The value is given for the selection of fuses.

AAE306-005 **03** **NR3..3.3ES2** **T07**
level max real measure
s

total reverse recovery time **t_tot**
t_{tot}

The maximum total reverse recovery time (in s) of an efficiency diode when switched from a specified forward current and with a specified rate-change of forward current and junction temperature to a reverse voltage of about 0,7 V (being the saturation voltage of the transistor in parallel) and a diode reverse current equal to zero.

NOTE
The moment the reverse current equals zero is measured by shifting the flyback pulse, used in the application circuit, and detecting the moment the front of the flyback pulse is entering the reverse current of the efficiency diode.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE275-005 = rate change of forward current
AAE994-005 = reverse current

AAE310-005 **02** **NR2..3.3** **E44**
level minTypMax real measure
Ω

diode forward resistance **r_D**
diode series resistance r_D

The value as specified by level (minTypMax) of the series resistance (in ohms) of a signal diode or variable capacitance diode at specified frequency and forward current.

AAE029-005 = frequency
AAE274-005 = forward current

AAE311-005 **02** **NR2..3.3** **E44**
level minTypMax real measure
Ω

diode reverse resistance **r_s**
diode series resistance r_s

The value as specified by the level (minTypMax) of the series resistance (in ohms) of a tuning variable capacitance diode at specified frequency and adjusted diode capacitance.

NOTE
The specified diode capacitance has to be adjusted with the reverse voltage.

AAE029-005 = frequency
AAE497-005 = diode capacitance

AAE312-005 **01** **X..3** **A56**
simple non-quantitative code

diode function **diode function**

Code of the function of a stabiliser diode.

CUR = current regulator diode
REF = voltage reference diode
REG = voltage regulator diode
STA = stabistor
SUP = transient suppressor diode

AAE313-005 **01** **NR2..3.3** **E06**
level max real measure
V

clamping voltage **V_(CL)R**
$V_{(CL)R}$

The maximum clamping voltage (in V) of a transient suppressor diode at specified non-repetitive peak reverse current, virtual front time and virtual time to half-value.

AAE315-005 = non-rep peak reverse current
AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value

REMARKS:

8/20 impulse:	8 us virtual front time
	20 us virtual time to half-value
4/10 impulse:	4 us virtual front time
	10 us virtual time to half-value

AAE315-005 **02** **NR2..3.3** **E01**
simple real measure
A

non-rep peak reverse current **@I_RSM**
$@I_{RSM}$

The non-repetitive peak reverse current (in A) of a stabiliser diode, as a variable.

IEC 60060-1 (1989)

AAE316-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

working current **I_Z**
I_Z

The maximum direct reverse current (in A) which may be applied continuously to a voltage reference diode, voltage regulator diode or transient suppressor diode.

AAE317-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

peak working current **I_ZM**
I_{ZM}

The maximum peak working current (in A) of a stabiliser diode.

AAE318-005 **02** **NR2..3.3** **E01**
level max real measure
A

non-repetitive peak reverse current **I_RSM**
I_{RSM}

The maximum non-repetitive peak reverse current (in A) of a stabiliser diode at specified virtual front time and virtual time to half-value.

AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value

IEC 60060-1 (1989)

REMARKS:

8/20 impulse:	8 us virtual front time
	20 us virtual time to half-value
4/10 impulse:	4 us virtual front time
	10 us virtual time to half-value
6/320 impulse:	6 us virtual front time
	320 us virtual time to half-value
10/1000 impulse:	10 us virtual front time
	1000 us virtual time to half-value

AAE319-005 **01** **NR1..4** **E06**
level max integer measure
V

maximum clamping voltage **U_clam**
max peak voltage at I_class U_{clam}
voltage at class current (IEC)

The maximum clamping voltage (in V) across a varistor when, at reference conditions, a specified pulse current, with specified virtual front time and virtual time to half-value, is passed through the varistor.

AAE125-005 = current (pulse)
AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value
AAE995-005 = reference conditions

IEC 61051-1 (1991)

AAE322-005 **01** **NR2 S..3.3** **E06**
level max real measure
%/K

temperature coefficient S_Z **S_Z**
S_Z

The maximum temperature coefficient (in %/K) of a voltage reference diode or voltage stabiliser diode, at specified working current.

AAE500-005 = working current

AAE323-005 **01** **NR2..3.3** **E33**
level max real measure
Ω

differential resistance **r_dif**
r_{dif}

The maximum differential resistance (in ohms), being the quotient of the delta V_F and delta I_F, of a voltage reference diode at specified working current.

AAE500-005 = working current

AAE324-005 **01** **NR2..3.3** **E06**
level miNoMax real measure
V

working voltage **V_Z**
reference voltage V_Z
regulation voltage V_{ref}

The value as specified by level (miNoMax) of the working voltage (in V) of a voltage regulator diode or voltage reference diode at specified working current.

AAE500-005 = working current

AAE326-005 **01** **NR2..3.3** **H02**
simple real measure
Cel

tie point temperature **@T_tp**
$@T_{tp}$

The temperature (in Cel) of the tie point of a voltage regulator diode, as a variable.

AAE327-006 **01** **NR1..4** **H07**
level max integer measure
W

non-rep peak reverse power diss **P_ZSM**
P_{ZSM}

The maximum non-repetitive peak reverse power dissipation (in W) of a stabilising diode, at specified time duration and junction temperature prior to the application of the square shaped pulse.

AAE028-005 = duration
AAE271-005 = junction temperature

AAE328-005 **02** **NR2..3.3** **E33**
level max real measure
Ω

differential resistance **r_dif**
r_{dif}

The maximum quotient of the delta V_F over delta I_F (in ohms), of a voltage regulator diode or stabistor at specified forward current and a frequency of 1000 Hz.

AAE274-005 = forward current

AAE329-005 **01** **NR3 S..3.3ES2** **E06**
level max real measure
V/K

temperature coefficient S_F **S_F**
S_F

The maximum temperature coefficient (in V/K) of a stabistor at specified forward current and forward voltage.

AAE274-005 = forward current
AAE499-005 = forward voltage

AAE331-005 **01** **M..17** **A58**
simple string

diode package **diode package**
diode envelope

Code of the envelope of a diode or trigger device.

AAE332-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

virtual front time **@t_1**
$@t_1$

The virtual front time t_1 (in s) of an impulse applied to a stabiliser diode, as a variable.

NOTE
If oscillations are present on the front, the 10 % and 90 % values should be derived from a mean curve drawn through these oscillations in an analogous manner to that used for oscillatory lightning impulses.

IEC 60060-1 (1989)

REMARKS:
The difference between front times measured according to this definition and to that given in IEC 60060-1 (1989) for lightning impulses is generally less than 10 %.

AAE333-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

virtual time to half-value **@t_2**
$@t_2$

The virtual time to half-value t_2 (in s) of an impulse current applied to a stabiliser diode, as a variable.

IEC 60060-1 (1989)

AAE334-005 **01** **NR1..4** **E06**
level minMax integer measure
V

varistor voltage at 1 mA **U_var(1mA)**
$U_{var(1mA)}$

The value as specified by level (minMax) of the dc voltage (in V) across a varistor when a current of 1 mA dc is passed through it.

AAE335-005 **01** **NR2..3.3** **E06**
simple real measure
V

reverse voltage **@V_R**
stand-off voltage $@V_R$

The direct voltage (in V) applied to a diode or optoelectronic device in reverse direction, as a variable.

IEC 60747-2 (2000)

AAE336-005 **01** **NR1..4** **H02**
level max integer measure
Cel

mounting base temperature **T_mb**
T_{mb}

The maximum temperature (in Cel) of the mounting base of a transistor, diode, trigger device, optoelectronic device or IC.

JESD 77B (2000)

AAE337-005 **01** **NR1..4** **H02**
level max integer measure
Cel

junction temperature **T_j**
virtual junction temperature T_j

The maximum junction temperature (in Cel) of a transistor, diode, trigger device, optoelectronic device or IC.

IEC 60747-1 (1983)

AAE338-005 **01** **NR1..4** **E06**
level max integer measure
V

maximum noise voltage **U_n**
voltage handling capacity U_n

The maximum simulated programme noise voltage of a loudspeaker (in V), of specified duration and at specified filter and mounting of loudspeaker.

NOTE
After the maximum voltage has been applied, no thermal or mechanical damage fault may result.

AAE028-005 = duration
AAE342-005 = mounting of loudspeaker
AAE343-005 = filter

AAE339-005 **02** **NR3..3.3ES2** **F03**
level nom real measure
Hz

upper rated frequency **f_upr**
f_{upr}

The nominal upper frequency (in Hz) of a loudspeaker.

AAE340-005 **01** **NR3..3.3ES2** **F03**
level min real measure
Hz

effective frequency f_e2 **f_e2**
f_{e2}

The minimum value of the upper effective frequency (in Hz) of a loudspeaker, microphone or antenna.

REMARKS:
For a loudspeaker, the -10 dB frequency.

AAE341-005 **01** **NR3..3.3ES2** **F03**
level max real measure
Hz

effective frequency f_e1 **f_e1**
f_{e1}

The maximum value of the lower effective frequency (in Hz) of a loudspeaker, microphone or antenna.

REMARKS:
For a loudspeaker, the -10 dB frequency.

AAE342-005 **01** **M..3** **A51**
simple non-quantitative code

mounting of loudspeaker **@lsp mounting**

Code of the mounting arrangement of a loudspeaker.

ENC = enclosure
HSF = half space free field
UNM = unmounted
BFL = baffle

NOTE
The performance of a loudspeaker system is determined by the properties of the loudspeaker unit itself and its acoustic loading. The acoustic loading depends upon the mounting arrangements as there are: a) a standard baffle or specified enclosure, b) in free air without a baffle or enclosure, c) in half space free-field, flush with the reflecting plane.

AAE343-005 **01** **M..3** **A51**
simple non-quantitative code

filter **@filter**
network

Code of the filter used with a loudspeaker.

L = L network
S = series network
W = without filter

REMARKS:
The L network is a capacitor in series with a coil and loudspeaker in parallel.

AAE345-005 **01** **M..3** **A58**
simple non-quantitative code

female entry **female entry**
socket-inlet
bottom entry

Code of the entry of a connector.

ONE = one-way
TWO = two-way (bottom entry)

AAE347-005 **01** **M..17** **A59**
simple string

CECC specification **CECC spec**

CECC code of the specification in which an electric/ electronic or electromechanical component is released under the CECC quality assessment system.

CECC 00100

REMARKS:
CECC = CENELEC Electronic Components Committee
CENELEC = European Committee for Electrotechnical Standardisation
Quality assessment:
The continuous surveillance of the manufacturer of a product to ensure that it conforms to the requirements of the specification to which it was made.
GEN = general
SEC = sectional
DET = detail

AAE348-005 **01** **M..3** **A58**
simple non-quantitative code

pinning arrangement **pin arrangement**

Code of the pinning arrangement of a connector.

CIR = circular
CON = concentric
SQU = square
STA = staggered

AAE349-006 **01** **M..8** **A56**
simple non-quantitative code

connector type **connector**

Code of the type of a connector, according to its shape, application, mating part or the type of component to which it will be permanently attached.

CIRC = circular connector
IC = connector for IC cards
JACK = plug or jack
MOD = modular connector
PCB = connector for PCB
RECT = rectangular connector
RF = rf connector
SOCK = socket
TERM = terminal

AAE350-005 **01** **M..8** **A57**
simple non-quantitative code

contact finish **contact finish**

Code of the finish material of the contacts of a connector, relay or switch.

Ag = silver
Au = gold
CuZn = brass
Ni = nickel
PCuSn = phosphor bronze
Pd = palladium
Sn = tin
Zn = zinc

AAE351-006 **01** **M..8** **A57**
simple non-quantitative code

housing material **housing mat**
shell material

Code of the material of the housing or shell of a connector or switch.

CER = ceramic
DAP = *diallylphthalate
MET = metal
PA = *polyamide
PC = *polycarbonate (makrolon)
PLA = plastic
PPOX = *polyphenyleneoxide (noryl)
PTFE = *polytetrafluorethylene (teflon)

AAE352-005 **01** **M..8** **A58**
simple non-quantitative code

terminal-to-contact angle **term cont angle**

Code of the angle between terminal and contact of a connector.

DEG = 45 degree
RIGHT = 90 degree (right angle)
STRAI = 180 degree (straight)

AAE353-005 **01** **M..3** **A58**
simple non-quantitative code

contact sex **contact sex**
sex of contacts
sex of guides

IEC code of the type of the contact of a connector.

F = female (socket) IEC169-1 (1987)
H = hermaphroditic IEC169-1 (1987)
M = male (pin) IEC169-1 (1987)

IEC 60807-1 (1991)

AAE354-005 **01** **M..8** **A58**
simple non-quantitative code

polarisation **polarization**

Code of the means by which polarisation of a connector is achieved.

CONTAC = contact
JUMPER = jumper
PIN = pin
PLUG = plug
SHELL = shell

REMARKS:
Polarisation is a shape feature on connectors to prevent incorrect mating.

AAE355-005 **01** **M..8** **A57**
simple non-quantitative code

contact body material **cont body mat**

Code of the material of the body of the contacts of a connector, relay or switch.

BeCu = beryllium copper
Cu = copper
CuSn = bronze
CuZn = brass
Ni = nickel
PCuSn = phosphor bronze

AAE356-005 **02** **M..3** **A58**
simple non-quantitative code

connector shape **connector shape**

Code of the shape of the shell of a connector.

CIR = circular (round)
D = D-connector
REC = rectangular

AAE357-005 **02** **M..3** **A59**
simple non-quantitative code

performance class **performance cls**

Code of the performance class of a connector.

1 = 1
1a = 1a
2 = 2
3 = 3

REMARKS:
Performance class is the combination of mechanical endurance and climatic category.

performance class	mechanical endurance	climatic category
		min/max/days
1	500	55/125/56
1a	500	65/125/65
2	400	55/125/00
3	50	55/125/00

AAE358-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

contact current max **I_cont**
I_{cont}

The maximum continuous rms current (in A) per contact of a connector, at specified ambient temperature.

AAE014-005 = ambient temperature

AAE359-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of contacts **N_cont**
contact positions N_{cont}

The total number of contacts of a connector.

AAE360-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of rows **N_row**
N_{row}

The number of contact rows of a connector.

REMARKS:
The rows used to arrange the total number of contacts in a rectangle or trapezium form.

AAE361-005 **02** **NR1..4** **Q59**
level min integer measure
1

mechanical endurance **N_endu**
insertions N_{endu}

The minimum number of engagements and separations that the connector can withstand without electrical load.

NOTE
After test the connector shall fulfil requirements stated in IEC 60169-1 (1987).

IEC 60169-1 (1987)

AAE362-005 **02** **NR3..3.3ES2** **T03**
level min real measure
m

connector opening **d_con**
printed board thickness d_{con}
aperture

The minimum opening (in m) in an edge connector to receive the metal-clad base material of a printed board including conductive layer or layers but excluding additional plating.

IEC 60194 (1999)

AAE363-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

contact length under housing **l_cont**
l_{cont}

The nominal length (in m) of that part of a contact of a connector that is intended to make contact with the mating part.

IEC 60050 (581) (1978)

REMARKS:
Terminating end outside the connector housing.

AAE364-005 **02** **M..3** **A55**
simple non-quantitative code

gate type **gate type**

Code indicating the type of gate of a field-effect transistor.

DEP = *depletion
ENH = *enhancement
INS = insulated gate
JUN = junction gate

AAE366-005 **01** **M..3** **A57**
simple non-quantitative code

channel type **channel type**

Code indicating the material type of the channel(s) of a field-effect transistor.

N = N-channel
P = P-channel

AAE367-005 **02** **NR3 S..3.3ES2** **E01**
simple real measure
A

drain current (dc) **@I_D**
$@I_D$

The direct current (in A) flowing through the drain of a field-effect transistor, as a variable.

AAE368-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

drain current (dc) **I_D**
I_D

The maximum direct drain current (in A) of a field effect transistor.

AAE370-005 **01** **NR3 S..3.3ES2** **E01**
level minMax real measure
A

drain current (dc) **I_DSS**
I_{DSS}

The value as specified by level (minMax) of the direct drain current (in A) of a field-effect transistor at specified drain-source voltage and source short-circuited to the gate.

AAE376-005 = drain-source voltage

AAE371-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

drain cut-off current **I_DSX**
I_{DSX}

The maximum guaranteed drain cut-off current (in A) of a field-effect transistor at specified drain-source voltage, gate-source voltage and source-substrate voltage.

AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage
AAE388-005 = source-substrate voltage

IEC 60747-8 (2000)

AAE372-005 **01** **NR3 S..3.3ES2** **E01**
level minTypMax real measure
A

gate cut-off current **I_GSS**
reverse gate current I_{GSS}

The value as specified by level (minTypMax) of the reverse gate current (in A) of a field-effect transistor with the drain short-circuited to the source and at specified gate-source voltage and temperature of a temperature type.

AAE381-005 = gate-source voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAE373-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

source cut-off current **I_SDX**
I_{SDX}

The maximum guaranteed source cut-off current (in A) of a field-effect transistor at specified drain-source voltage, drain-gate voltage and drain-substrate voltage.

AAE375-005 = drain-gate voltage
AAE376-005 = drain-source voltage
AAE378-005 = drain-substrate voltage

IEC 60747-8 (2000)

AAE374-005 **01** **NR1..4** **E06**
level min integer measure
dB

common-mode rejection ratio **CMRR**
CMRR

The minimum guaranteed common mode rejection ratio (in dB) of a dual field-effect transistor at specified drain current, drain-gate voltage and frequency.

AAE029-005 = frequency
AAE367-005 = drain current (dc)
AAE375-005 = drain-gate voltage

$$\mathrm{CMMR} = -20\log\left|\Delta\frac{g_{os}}{g_{fs}}\right| \text{ in dB}$$

AAE375-005 **02** **NR1..4** **E06**
simple integer measure
V

drain-gate voltage **@V_DG**
$@V_{DG}$

The direct voltage (in V) between the drain and gate of a field-effect transistor, as a variable.

AAE376-005 **01** **NR1 S..4** **E06**
simple integer measure
V

drain-source voltage **@V_DS**
$@V_{DS}$

The direct voltage (in V) between drain and source terminals of a field-effect transistor, as a variable.

AAE377-005 **02** **NR1 S..4** **E06**
level max integer measure
V

drain-source voltage limit **V_DSlim**
V_{DSlim}

The maximum limiting direct voltage (in V) between drain and source terminals of a field-effect transistor.

AAE378-005 **02** **NR1 S..4** **E06**
simple integer measure
V

drain-substrate voltage **@V_DB**
$@V_{DB}$

The direct voltage (in V) between the substrate and drain of a field-effect transistor, as a variable.

AAE379-005 **02** **NR1 S..4** **E06**
level max integer measure
V

drain-substrate voltage limit **V_DBlim**
V_{DBlim}
V_{DUlim}

The maximum limiting direct voltage (in V) between drain and substrate of a field-effect transistor.

AAE380-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

equivalent noise voltage **V_n**
equivalent input noise voltage V_n

The maximum equivalent noise voltage (in V) of a field effect transistor at specified drain current, drain-source voltage and bandwidth.

AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage
AAE934-005 = bandwidth

IEC 60747-1 (1983)

AAE381-005 **01** **NR1 S..4** **E06**
simple integer measure
V

gate-source voltage **@V_GS**
@V_{GS}

The direct voltage (in V) between gate and source terminals of a field-effect transistor, as a variable.

AAE383-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

gate-source voltage difference **|$DV_GS|**
$|\Delta V_{GS|}$

The maximum absolute value (in V) of the difference in direct gate-source voltages of a dual field-effect transistor at specified drain current and drain-gate voltage.

AAE367-005 = drain current (dc)
AAE375-005 = drain-gate voltage

AAE384-005 **02** **NR1 S..4** **E06**
level minTypMax integer measure
V

gate-source threshold voltage **V_GSth**
V_{GSth}
$V_{GS(T)}$
$V_{GS(TO)}$

The value as specified by level (minTypMax) of the direct threshold voltage (in V) between gate and source terminals of an enhancement field-effect transistor at specified drain current and drain-source voltage.

AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage

IEC 60747-8 (2000)

AAE386-005 **01** **NR1 S..4** **E06**
level minTypMax integer measure
V

gate-source cut-off voltage **V_GSoff**
V_{GSoff}
$V_{(P)GS}$

The value as specified by level (minTypMax) of the gate-source cut-off voltage (in V) of a depletion field-effect transistor at specified drain current, drain-source voltage and temperature of a temperature type.

AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage
AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60747-8 (2000)

AAE387-005 **02** **NR1 S..4** **E06**
level max integer measure
V

source-substrate voltage limit **V_SBlim**
V_{SBlim}

The maximum limiting direct voltage (in V) between source and substrate of a field-effect transistor.

AAE388-005 **01** **NR1 S..4** **E06**
simple integer measure
V

source-substrate voltage **@V_SB**
@V_{SB}

The direct voltage (in V) between the source and the substrate of a field-effect transistor, as a variable.

AAE389-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V/K

thermal drift gate-source voltage
d($DV_GS)/dT
$|d(\Delta V_{GS)}/dT|$

The maximum absolute value (in V/K) of the thermal drift of the gate-source voltage difference of a dual field-effect transistor at specified drain-gate voltage, drain current and ambient temperature.

AAE014-005 = ambient temperature
AAE367-005 = drain current (dc)
AAE375-005 = drain-gate voltage

AAE390-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

feedback capacitance **C_rs**
transfer capacitance C_{rs}
C_{rss}

The value as specified by level (minTypMax) of the capacitance (in F) between the drain and the gate with the input short-circuited to ac, of a field-effect transistor at specified frequency, drain-source voltage and gate-source voltage.

AAE029-005 = frequency
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage

IEC 60747-8 (2000)

AAE391-005 **02** **NR3..3.3ES2** **E33**
level minTypMax real measure
Ω

drain-source on-state resistance **R_DSon**
R_{DSon}

The value as specified by level (minTypMax) of the dc resistance (in ohms) between the drain and source terminals of a field-effect transistor with a specified gate-source voltage applied to bias the device to the on-state, a specified drain current and temperature of a temperature type.

AAE367-005 = drain current (dc)
AAE381-005 = gate-source voltage
AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60747-8 (2000)

AAE393-005 **02** **NR3..3.3ES2** **E33**
level max real measure
Ω

drain-source on-state resistance **r_ds(on)**
$r_{ds(on)}$

The maximum small-signal resistance (in ohms) between the drain and source terminals of a unipolar field effect transistor with a specified gate-source voltage applied to bias the device in the on-state, and at specified drain-source voltage, source-substrate voltage and frequency.

AAE029-005 = frequency
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage
AAE388-005 = source-substrate voltage

IEC 60747-8 (2000)

AAE394-005 **02** **NR3..3.3ES2** **E33**
level min real measure
Ω

drain-source off-state resistance **R_DSoff**
R_{DSoff}

The minimum dc resistance (in ohms) between drain and source terminals of a field-effect transistor with a specified gate-source voltage to bias the device in the off-state, and specified drain-source voltage and source-substrate voltage.

AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage
AAE388-005 = source-substrate voltage

IEC 60747-8 (2000)

AAE396-005 **02** **NR3..3.3ES2** **E45**
level minTypMax real measure
S

transfer admittance **|Y_fs|**
$|Y_{fs|}$

The value as specified by level (minTypMax) of the modulus of the transfer admittance (in S) of a field effect transistor at specified frequency, drain current, gate-source voltage and drain-source voltage.

AAE029-005 = frequency
AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage

AAE400-005 **01** **NR1..4** **H02**
simple integer measure
Cel

heatsink temperature **@T_h**
$@T_h$

The temperature (in Cel) of the heatsink of a transistor, diode, trigger device, optoelectronic device or IC, as a variable.

AAE401-005 **01** **X..3** **A55**
simple non-quantitative code

transistor technology **tra technology**

Code of the technology to which a transistor belongs.

BIP = bipolar transistor
FET = field-effect transistor

AAE402-005 **02** **NR3..3.3ES2** **E01**
level minTypMax real measure
1

dc current gain **h_FE**
h_{FE}

The value as specified by level (minTypMax) of the static ratio of the collector current to the base current of a bipolar transistor in common emitter configuration at specified collector current, collector-emitter voltage and junction temperature.

AAE271-005 = junction temperature
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage

IEC 60748

AAE405-005 **02** **NR3..3.3ES2** **E01**
level max real measure
A

collector current (dc) max **I_C**
I_C

The maximum direct collector current (in A) of a bipolar transistor or optoelectronic device.

IEC 60748

AAE406-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

collector current (dc) **@I_C**
$@I_C$

The direct collector current (in A) of a bipolar transistor or transistor part of an electronic device, as a variable.

IEC 60748

AAE407-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

collector current peak value **I_CM**
I_{CM}

The maximum peak value of the collector current (in A) of a bipolar transistor during a specified duration.

AAE028-005 = duration

AAE408-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

emitter current (dc) **@I_E**
$@I_E$

The direct emitter current (in A) of a bipolar transistor, as a variable.

IEC 60748

AAE409-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

base current (dc) **@I_B**
$@I_B$

The direct base current (in A) of a bipolar transistor, as a variable.

AAE410-005 **03** **NR1..4** **E01**
level minTypMax integer measure
1

small-signal current gain **h_fe**
h_{fe}

The value as specified by level (minTypMax) of the dynamic ratio of the collector current to the base current of a bipolar transistor in common-emitter configuration at specified collector current, collector-emitter voltage, junction temperature and frequency.

AAE029-005 = frequency
AAE271-005 = junction temperature
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage

IEC 60748

AAE412-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

collector-emitter voltage **@V_CE**
$@V_{CE}$

The direct voltage (in V) between the collector and emitter terminals of a bipolar transistor, as a variable.

IEC 60748

AAE413-005 **02** **NR2 S..3.3** **E06**
level max real measure
V

collector-emitter voltage V_CE **V_CER**
V_{CER}

The maximum direct voltage (in V) between collector and emitter terminals of a bipolar transistor at specified resistance between base and emitter terminals.

AAE906-005 = base-emitter resistance

IEC 60748

AAE414-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V

collector-emitter voltage V_CE **V_CEO**
V_{CEO}

The maximum voltage (in V) between collector and emitter terminals of a bipolar transistor at open base terminal.

IEC 60748

AAE415-005 **01** **NR2 S..3.3** **E06**
level max real measure
V

collector-emitter peak voltage V_CESM
V_{CESM}

The maximum peak collector-emitter voltage (in V) of a bipolar transistor when the base terminal is short-circuited to the emitter terminal.

IEC 60748

AAE416-005 **01** **NR2 S..3.3** **E06**
level minTypMax real measure
V

collector-emitter sat voltage V_CEsat
V_{CEsat}

The value as specified by level (minTypMax) of the collector-emitter saturation voltage (in V) of a bipolar transistor at specified collector current, base current and junction temperature.

NOTE
This is the voltage between collector and emitter terminals when both the base-emitter and base-collector junctions are forward biased.

AAE271-005 = junction temperature
AAE406-005 = collector current (dc)
AAE409-005 = base current (dc)

IEC 60748

AAE417-005 **01** **NR2 S..3.3** **E06**
level max real measure
V

collector-base voltage V_CBO **V_CBO**
V_{CBO}

The maximum voltage (in V) between collector and base terminals of a bipolar transistor at open emitter terminal.

IEC 60748

AAE418-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

difference base-emitter voltage **|V_1BE-V_2BE|**
$|V_{1BE-V2BE|}$

The absolute value of the maximum difference (in V) of the base-emitter voltages of a dual bipolar transistor at specified sum of emitter currents and equal collector-base voltage and at equal collector currents.

AAE408-005 = emitter current (dc)
AAE419-005 = collector-base voltage

AAE419-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

collector-base voltage **@V_CB**
$@V_{CB}$

The direct voltage (in V) between the collector and base terminals of a bipolar transistor, as a variable.

JESD 77B (2000)

AAE420-005 **01** **NR3..3.3ES2** **E09**
level minMax real measure
F

collector capacitance **C_c**
C_c

The value as specified by level (minMax) of the capacitance (in F) between collector and emitter terminals of a bipolar transistor at specified emitter current, collector-base voltage and frequency.

AAE029-005 = frequency
AAE408-005 = emitter current (dc)
AAE419-005 = collector-base voltage

AAE421-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

feedback capacitance **C_re**
transfer capacitance C_{re}

The value as specified by level (minTypMax) of the capacitance (in F) measured between collector and base terminals of a bipolar transistor in common-emitter configuration, at specified collector current, collector-emitter voltage, and frequency.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage

JESD 77B (2000)

AAE422-005 **02** **NR2..3.3** **E49**
level nom real measure
W

output power **P_L**
load power P_L

The nominal rf output power (in W) of a bipolar transistor at specified collector-emitter voltage, frequency and heatsink temperature.

AAE029-005 = frequency
AAE400-005 = heatsink temperature
AAE412-005 = collector-emitter voltage

IEC 60050-713 (1998)

AAE424-005 **02** **NR2..3.3** **E49**
level minTypMax real measure
dB

power gain **G_p**
G_p

The value as specified by level (minTypMax) of the ratio (in dB) of the output power to the input power of a bipolar transistor or wideband amplifier at specified supply voltage, frequency, output power and temperature of a temperature type.

AAE029-005 = frequency
AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE955-005 = output power

AAE425-005 **02** **NR3..3.3ES2** **F03**
level minTypMax real measure
Hz

transition frequency **f_T**
f_T

The value as specified by level (minTypMax) of the frequency (in Hz) at which the small-signal current gain has decreased to unity when the output is short-circuited at specified collector current and collector-emitter voltage.

AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage

IEC 60748

AAE426-005 **02** **NR3..3.3ES2** **F03**
level minTypMax real measure
Hz

cut-off frequency **f_hfe**
frequency at h_fe is -3dB f_{hfe}

The value as specified by level (minTypMax) of the frequency (in Hz) of a bipolar transistor at which the small-signal current gain is 3 dB below its value at low frequencies at specified collector current and collector-emitter voltage.

AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage

IEC 60748

AAE427-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

base-emitter voltage **@V_BE**
$@V_{BE}$

The direct voltage (in V) between the base and emitter terminals of a bipolar transistor, as a variable.

JESD 77B (2000)

AAE429-005 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

varistor capacitance **C_var**
C_{var}

The nominal capacitance (in F) of a varistor at specified frequency.

AAE029-005 = frequency

AAE430-005 **01** **NR2..3.3** **H06**
level max real measure
J

energy absorbing capacity max **E_abs**
E_{abs}

The maximum limiting energy content (in J), of a pulse current with specified virtual front time and virtual time to half-value, that can be absorbed by a varistor.

AAE125-005 = current (pulse)
AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value

AAE442-005 **01** **M..8** **A56**
simple non-quantitative code

colour TV transmission **colour TV trans**

Code of the type of colour television transmission applying to a delay line or IC.

MULTI = multi-standard system
NTSC = National Television System Committee
PAL = Phase Alternating Line
SECAM = Sequential Colour And Memory

AAE457-005 **01** **M..3** **A56**
simple non-quantitative code

numeral system **numeral system**

Code of the numeral system of a digital signal function of an IC.

BIN = binary
DEC = decimal
HEX = hexadecimal
OCT = octal

ISO/IEC 2382-5 (1999)

AAE458-005 **02** **NR1..4** **Q62**
level nom integer measure
1

number of inputs **N_in**
N_{in}

Number of inputs of a function of an IC.

AAE459-005 **01** **NR1..4** **J01**
level nom integer measure
bit

word size **N_bit**
word length N_{bit}
number of bits

The number of bits per word applying to a digital function of an IC.

ISO 2382-4 (1999)

AAE464-005 **01** **M..3** **A56**
simple non-quantitative code

mode of control **control mode**

Code of the mode of control of a function of an IC.

E = edge-triggered
L = level-triggered
R = reset
S = set

AAE474-005 **02** **NR3..3.3ES2** **J01**
level nom real measure
1

storage size **storage size**
storage capacity storage size
number of words

The number of words specifying the data storage capacity of a digital memory function on an IC.

ISO 2382-12 (1988)

REMARKS:
The data storage capacity of a digital memory IC is sometimes referred to as -memory organisation- and (number of words) x (number of bits per word)
Examples: 256x1 : 256x4 : 1024x8 etc.

AAE487-005 **02** **M..3** **A56**
simple non-quantitative code

frequency band **frequency band**

IEC standard abbreviation of the name of the frequency band for the application of an electric-electronic component.

RF	radio frequency	3 kHz	-	300 GHz
VLF	very low frequency	3	-	30 kHz
LF	low frequency	30	-	300 kHz
MF	medium frequency	300	-	3000kHz
HF	high frequency	3	-	30 MHz
VHF	very high frequency	30	-	300 MHz
UHF	ultra high frequency	300	-	3000 MHz
SHF	super high frequency	3	-	30 GHz
EHF	extremely high frequency	30	-	300 GHz
BB	baseband:			
AF	audio frequency approx	0	-	20 kHz
VF	video frequency approx.	0	-	20 MHz
PB	passband			
IF	intermediate frequency			

AAE488-005 **01** **M..3** **A56**
simple non-quantitative code

diode configuration **diode config**

Code of the mode of configuration of a breakover diode, rectifier diode, signal diode or variable capacitance diode.

CAn = n-diodes common anode
CCn = n-diodes common cathode
SCn = n-diodes series connected
SEn = n-diodes separated
SIN = single diode

REMARKS:
n is marked for the values 2 up to and including 9.

AAE489-005 **01** **M..3** **A55**
simple non-quantitative code

diode technology **diode techn**

Code of the type of technology of a diode.

AVA = avalanche diode
PIN = pin diode
SCH = Schottky diode
TUN = tunnel diode

AAE490-005 **03** **M..8** **A56**
simple non-quantitative code

modulation method **modulation**

IEC standard abbreviation of the type of modulation for the application of an electric-electronic component.

AM = amplitude modulation
ASK = amplitude shift keying
DM = *delta modulation
DSB = *double sideband
DSBSC = *double sideband suppressed carrier
FM = frequency modulation
FSK = frequency shift keying
ISB = *independent sideband
MPSK = *multiple phase shift keying
n-FSK = *n-condition frequency shift keying
PAM = pulse amplitude modulation
PCM = pulse code modulation
PDCM = *differential pulse code modulation
PDM = *pulse duration modulation
PDSK = *differential phase shift keying
PFM = *pulse frequency modulation
PM = phase modulation
PPM = *pulse position modulation
PSK = phase shift keying
PTM = pulse time modulation
QAM = *quadrature amplitude modulation
QPSK = *quadrature phase shift keying
SSB = *single sideband
VSB = *vestigial sideband

AAE494-005 **02** **M..35** **A56**
simple string

nearest conventional type **near conv type**

Type number of the nearest conventional type, with comparable electrical specification, as the surface-mounted diode or transistor under consideration.

AAE496-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

diode capacitance **C_d**
C_d

The value as specified by level (minTypMax) of the capacitance (in F) between the terminals of a diode or optoelectronic device at specified reverse voltage and frequency.

AAE029-005 = frequency
AAE335-005 = reverse voltage

IEC 60747-3 (1985)

AAE497-005 **01** **NR3..3.3ES2** **E09**
simple real measure
F

diode capacitance **@C_d**
@C_d

The capacitance (in F) of a variable capacitance diode, as a variable.

NOTE
The specified diode capacitance has to be adjusted with the reverse voltage.

IEC 60747-3 (1985)

AAE499-005 **01** **NR2..3.3** **E06**
simple real measure
V

forward voltage **@V_F**
on-state voltage @V_F

The forward voltage (in V) across a diode or optoelectronic device, as a variable.

IEC 60747-2 (2000)

AAE500-005 **01** **NR3..3.3ES2** **E01**
simple real measure
A

working current **@I_Z**
@I_Z

The direct working current (in A) applied continuously to a voltage reference diode or voltage regulator diode, as a variable.

AAE502-005 **02** **NR2..3.3** **E09**
level minTypMax real measure
1

capacitance ratio **C_d1/C_d2**
C_{d1}/C_{d2}

The value as specified by level (minTypMax) of the capacitance ratio of a tuning variable capacitance diode, within a reverse voltage range, specified by the reverse voltages (V_1 and V_2), and at specified frequency.

AAE029-005 = frequency
AAE961-005 = voltage V_1
AAE962-005 = voltage V_2

$$\frac{C_d 1 \text{ at}(V_R = V_1)}{C_d 2 \text{ at}(V_R = V_2)}$$

AAE503-005 **01** **M..3** **A56**
simple non-quantitative code

EHT stack application **EHT stack appl**

Number of phases of the application mode of an EHT rectifier diode stack.

1 = single-phase
2 = two-phase
3 = three-phase

AAE505-005 **01** **M..3** **A56**
simple non-quantitative code

rectifier diode application **rec dio appl**

Code of the application of a rectifier diode.

EFF = efficiency diode
EHT = extra-high tension rectifier diode

AAE506-005 **01** **M..8** **A56**
simple non-quantitative code

switching function **switch function**

Code of the switching function of the contact assembly of a relay or switch.

NOTE
Not all values apply to switches.

B = B break (on-off)
BB = G break-break
BBM = H break-break-make
BM = C break-make (change-over)
BMB = E break-make-break
BMM = L break-make-make
BNB = M two-way break normally closed
DB = Y double break
DBDM = Z double break double make
DBDM-T = W DB double make (terminal on armature)
DB-T = V double break (terminal on armature)
DM = X double make
DM-T = U double make (terminal on armature)
M = A make (off-on)
MB = D make-break
MBM = I make-break-make
MM = F make-make
MMB = J make-make-break
MNM = K two-way make normally open

AAE508-005 **01** **M..8** **A56**
simple non-quantitative code

sealing **sealing**

IEC standard code of the sealing of a relay.

RT0 = non-sealed contacts
RTI = sealed contacts
RTII = sealed relays

AAE509-005 **03** **M..3** **A56**
simple non-quantitative code

U/I category **U/I category**

IEC standard code of the category of contact voltage and contact current of a relay.

NOTE
A contact may have the characteristics of more than one category.

0 = category 0 contacts (0-30 mV; 0-10 mA)
1 = category 1 contacts (30 mV-60 V; 10 -100 mA)
2 = category 2 contacts (60-250 V; 100 mA-1 A)
3 = category 3 contacts (250-600 V; 1 -100 A)

AAE510-005 **02** **X..3** **A56**
simple non-quantitative code

chargeability type **chargeability**

Code of the chargeability type of a battery.

PRI = primary battery (single charge)
SEC = secondary battery (rechargeable)

AAE511-007 **02** **X..8** **A56**
simple non-quantitative code

impedance type **impedance type**

Code of the impedance type of an antenna.

CAP = capacitive (whip)
IND = inductive (ferroceptor)
RES = resistive (tuned dipole)

AAE512-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

contact voltage (ac) **U_cont(ac)**
rated operational voltage (ac) $U_{cont(ac)}$

The maximum operating rms switching voltage (in V) of a switch or relay at resistive load.

NOTE
The rated voltage is the voltage between the contact members before closing or after opening.

IEC 60127-1 (1988)

AAE513-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

limiting contact voltage **U_cont(lim)**
insulation voltage $U_{cont(lim)}$

The maximum dc voltage (in V) of a switch or relay across open contacts.

IEC 60947-1 (2004)

AAE515-005 **03** **NR1..4** **E01**
level max integer measure
A

contact current (ac) **I_cont(ac)**
$I_{cont(ac)}$

The maximum rms switching current (in A) of a switch or relay at resistive load.

IEC 60947-1 (2004)

AAE517-005 **01** **NR3..3.3ES2** **E22**
level miNoMax real measure
H

inductance **L**
L

The value as specified by level (miNoMax) of the inductance (in H) of an inductive antenna, inductor, motor or transformer at specified frequency.

AAE029-005 = frequency

REMARKS:
For antennas, f = 10 kHz.

AAE518-005 **03** **NR3..3.3ES2** **E46**
level miNoMax real measure
1

quality factor **Q**
Q

The value as specified by level (miNoMax) of the quality factor of an inductive antenna or inductor at specified frequency.

AAE029-005 = frequency

AAE519-005 **01** **NR3 S..3.3ES2** **E06**
level nom real measure
V

nominal voltage **V**
V

The nominal voltage (in V) of a lamp or fuse.

REMARKS:
IEC 60432-1 (1999) :
If, for special reasons, lamps are marked with dual voltage, the rated voltage shall be taken as the mean of the voltage range.

AAE521-005 **03** **NR3..3.3ES2** **E01**
level nom real measure
A

nominal current **I_nom**
I_{nom}

The nominal current (in A) of a lamp at specified frequency and at the nominal voltage.

AAE029-005 = frequency

IEC 60598-1 (2003)

AAE522-005 **02** **M..3** **A58**
simple non-quantitative code

mounting-cap code **cap**

Code of the mounting cap of a lamp.

BAY = bayonet
LEA = leads
PIN = pin
SCR = screw

AAE523-005 **01** **NR3..3.3ES2** **H06**
level nom real measure
J

Joule-integral **(I**2)*t**
I^2t

The nominal value of the integral of the square of the current over the operating time interval (in J) of a fuse.

NOTES
1 The operating time is the sum of the pre-arcing time and the arcing time.
2 When considered from point of view of the circuit protected by a fuse, the value of the Joule-integral over the operating time of the fuse is referred to a specific energy, i.e. the energy released as heat in 1 Ω of circuit resistance.

IEC 60050-441, amendment 1 (2000)

AAE524-005 **02** **M..3** **A56**
simple non-quantitative code

speed **speed**

IEC standard code denoting the relative pre-arcing time/current characteristic of a fuse.

F = quick acting
FF = very quick acting
M = medium
T = time-lag
TT = long time-lag

IEC 60127-1 (1988)

AAE525-005 **02** **NR3..3.3ES2** **E01**
level max real measure
A

rated current **I_n**
I_n

The maximum continuous dc or ac rms current (in A) of a fuse at specified ambient temperature.

AAE014-005 = ambient temperature

IEC 62271-100 (2001)

AAE527-005 **01** **NR3..3.3ES2** **F03**
level miNoMax real measure
Hz

centre frequency **f_c**
f_c

The value as specified by level (miNoMax) of the centre frequency (in Hz) of a band pass or band stop filter.

AAE528-005 **02** **NR2 S..3.3** **F09**
simple real measure
dB

response level **@L_resp**
$@L_{resp}$

The value (in dB) representing the variation of the level on a point of the response curve of a quantity of a filter or delay line compared with its maximum level, as a variable.

IEC 60050(806) (1996) derived

AAE529-005 **03** **NR2..3.3** **E06**
level miNoMax real measure
V

open-circuit voltage **V_open**
V_{open}

The value as specified by level (miNoMax) of the open-circuit voltage (in V) of a battery.

AAE530-005 **02** **NR2..3.3** **E02**
level nom real measure
Ah

nominal capacity **Ah**
Ah

The nominal capacity (in Ah) of a battery.

AAE531-005 01 M..3 A55
simple non-quantitative code

primary electrochemical system pri elchem sys

IEC standard code of the electrochemical system of a primary battery.

A = oxygen – zinc -ammonium/zinc chloride
B = carbon monofluoride -lithium-ammonium/zinc chlor.
C = manganese dioxide – lithium-organic electrolyte
L = manganese dioxide – zinc -alkali metal hydroxide
M = mercuric oxide – zinc -alkali metal hydroxide
N = mercuric oxide + MnO2- zinc -alkali metal hydroxide
P = oxyge – zinc -alkali metal hydroxide
S = silver oxide – zinc -alkali metal hydroxide
T = silver oxide divalent- zinc -alkali metal hydroxide
X = manganese dioxide – zinc -ammonium/zinc chloride

IEC 60086-1 (2000)

REMARKS:

Code	anode	cathode	electrolyte
X	manganese dioxide	zinc	ammonium/zinc chloride
A	oxygen	zinc	ammonium/zinc chloride
B	carbon monofluoride	lithium	ammonium/zinc chloride
C	manganese dioxide	lithium	organic electrolyte
L	manganese dioxide	zinc	alkali metal hydroxide
M	mercuric oxide	zinc	alkali metal hydroxide
N	mercuric oxide + MnO2	zinc	alkali metal hydroxide
P	oxygen	zinc	alkali metal hydroxide
S	silver oxide	zinc	alkali metal hydroxide
T	silver oxide divalent	zinc	alkali metal hydroxide

AAE532-005 02 M..8 A55
simple non-quantitative code

secondary electrochemical system sec elchem sys

Code of the electrochemical system of a secondary battery.

AgCd = silver -cadmium -alkaline
AgZn = silver -zinc -alkaline
NiCd = nickel -cadmium -alkaline
NiFe = nickel -iron -alkaline
NiZn = nickel -zinc -alkaline
Pb = lead -acid -sulphuric acid

REMARKS:

Code	anode	cathode	electrolyte
NiCd	nickel	cadmium	alkaline
AgZn	silver	zinc	alkaline
Pb	lead	acid	sulphuric acid
NiFe	nickel	iron	alkaline
AgCd	silver	cadmium	alkaline
NiZn	nickel	zinc	alkaline

AAE533-005 02 NR3..3.3ES2 E44
level nom real measure
Ω

input impedance |Z_in|
$|Z_{in}|$

The nominal value of the modulus of the input impedance (in ohms) of a filter or microphone at specified frequency.

AAE029-005 = frequency

IEC 60050(131) (2002)

AAE534-005 01 NR3..3.3ES2 F03
level minMax real measure
Hz

bandwidth B
B

The value as specified by level (minMax) of the bandwidth (in Hz) of a filter or delay line at specified response level.

AAE528-005 = response level

IEC 60050(702) (1992)

AAE540-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

current rms **I_rms**
I_{rms}

The maximum rms current (in A) of an electric-electronic or electromechanical component at specified ambient temperature.

AAE014-005 = ambient temperature

AAE541-005 **01** **NR3..3.3ES2** **F03**
level nom real measure
Hz

frequency **f**
f

The nominal frequency (in Hz) of a delay line.

AAE542-005 **01** **M..3** **A56**
simple non-quantitative code

delay line application **del appl**

Code of the recommended application of a delay line.

CTV = colour television
VCR = video cassette recorder
VLP = video long play

AAE543-005 **02** **NR3..3.3ES2** **T07**
level miNoMax real measure
s

delay time **$t**
τ

The value as specified by level (miNoMax) of the delay time (in s) of a filter or delay line at specified frequency.

AAE029-005 = frequency

IEC 60050(351) (1998)

AAE544-005 **02** **NR3..3.3ES2** **T07**
level nom real measure
s

phase delay time **t_del**
t_{del}

The nominal phase delay time (in s) of a delay line.

IEC 60050(55) (1970)

NOTE
The phase delay time is the ratio of the total phase delay through the network, in cycles, to the frequency in Hz.

AAE545-006 **02** **X..8** **A56**
simple non-quantitative code

optoelectronic device function **opt function**

Code of the function to which an optoelectronic device belongs.

IMAGE = Image pickup devices
PHC = photocoupler
PHE = photoemitter
PHS = photosensor

IEC 60747-5 (1992)

AAE546-005 **03** **NR3..3.3ES2** **E01**
level max real measure
A

forward current limit **I_Flim**
I_{Flim}

The maximum limiting direct current (in A) flowing through a diode, or diode part of an optoelectronic device, in the forward direction.

IEC 60747-2 (2000)

AAE547-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

supply voltage **@V_B**
$@V_B$
$@V_{DD}$
$@V_{CC}$

The dc supply voltage (in V) applied to an optoelectronic device via an external circuit, as a variable.

AAE548-005 **02** **NR2..3.3** **E01**
level minTypMax real measure
1

current transfer ratio **CTR**
CTR
I_C/I_F

The value as specified by level (minTypMax) of the dc transfer ratio of the collector current and the diode forward current in a photocoupler at specified diode forward current, collector-emitter voltage and junction temperature.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE412-005 = collector-emitter voltage

JESD 77B (2000)

AAE550-005 **02** **NR3..3.3ES2** **E06**
level min real measure
V

isolation voltage min **V_IORM**
V_{IORM}

The minimum guaranteed dc test voltage (in V) across the shorted diode leads and the shorted transistor leads that a photocoupler must withstand for a specified duration.

AAE028-005 = duration

IEC 60747-5 (1992)

AAE551-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V

collector-emitter sat voltage **V_CEsat**
V_{CEsat}

The maximum guaranteed collector-emitter saturation voltage (in V) of a photocoupler at specified forward current, collector current and junction temperature.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE406-005 = collector current (dc)

AAE553-005 **03** **NR3..3.3ES2** **T07**
level nom real measure
s

turn-off time **t_off**
t_{off}

The nominal time (in s) elapsing between the end of the input pulse (90 % of its maximum value) and the moment when the corresponding output signal of a photocoupler falls to 10 % of its maximum value, at specified forward current, collector current, supply voltage, load resistance and junction temperature.

AAE212-005 = load resistance
AAE271-005 = junction temperature
AAE274-005 = forward current
AAE406-005 = collector current (dc)
AAE547-005 = supply voltage

AAE554-005 **02** **NR3..3.3ES2** **T07**
level nom real measure
s

turn-on time **t_on**
t_{on}

The nominal time (in s) elapsing between the start of the input pulse (10 % of its maximum value) and the moment when the corresponding output signal of a photocoupler is at least 90 % of its maximum value, at specified forward current, collector current, supply voltage load resistance and junction temperature.

AAE212-005 = load resistance
AAE271-005 = junction temperature
AAE274-005 = forward current
AAE406-005 = collector current (dc)
AAE547-005 = supply voltage

AAE555-005 **01** **X..3** **A56**
simple non-quantitative code

photoemitter function **PHE function**

Code of the function type to which a photoemitter belongs.

IRD = infrared emitting diode
LAS = laser
LED = LED

IEC 60747-5 (1992)

AAE556-005 **02** **NR3..3.3ES2** **L03**
level nom real measure
m

wavelength at peak emission **$l_peak**
peak-emission wavelength λ_{peak}

The nominal wavelength (in m) at which the spectral radiant intensity is maximum at a specified diode forward current and ambient temperature.

AAE014-005 = ambient temperature
AAE274-005 = forward current

IEC 60747-5 (1992)

AAE557-005 **02** **NR3..3.3ES2** **L03**
level nom real measure
m

spectral bandwidth **Dl**
$\Delta\lambda$

The nominal wavelength interval (in m) at which the responsivity of a photosensor or intensity of a photo-emitter is not less than half of its maximum value at specified ambient temperature.

AAE014-005 = ambient temperature

REMARKS:
Intensity applies to photoemitters; responsivity, to photosensitive devices.

AAE558-005 **01** **NR1..4** **T01**
level nom integer measure
deg

beamwidth between 50 % values **$q_1/2**
half-value beam angle $\theta_1/2$
$\alpha_{50\%}$

The nominal angle of the beamwidth (in deg) between the half value directions of the intensity of a photo-emitter or responsivity of a photosensor.

JESD 77B (2000)

REMARKS:
Intensity applies to photoemitters; responsivity, to photosensors.

AAE560-005 **02** **M..35** **A91**
simple non-quantitative code

package colour **package colour**
envelope colour

Name of the colour of a LED or IRED package.

blue-diff = blue-diffused
colourless = colourless-clear
green-clear= green-clear
green-diff = green-diffused
red-clear = red-clear
red-diff = red-diffused
yellow-clear= yellow-clear
yellow-diff = yellow-diffused

REMARKS:
For the materials used and the resulting colours in the emitting condition, see AAE563-005 and AAE564-005.

AAE561-005 **02** **NR3..3.3ES2** **L10**
level nom real measure
W

radiant output power **$f_e**
radiant flux φ_e
P_{out}

The nominal radiant output power (in W) of a laser photoemitter at specified wavelength and case temperature.

AAE260-005 = case temperature
AAE569-005 = wavelength at peak value

IEC 60306-1 (1969)

AAE562-005 **01** **M..17** **A56**
simple string

luminous intensity class **I_v(cl)**
$I_{v(cl)}$

Code of a luminous-intensity class of a LED.

AAE563-005 **01** **M..17** **A57**
simple non-quantitative code

LED crystal material **LED xtal mat**

The abbreviated name of the crystal material of a photoemitter.

GaAlAs = GaAlAs
GaAs = GaAs
GaAsP = GaAsP
GaAsP/GaP = GaAsP/GaP
GaP = GaP
GaP(ZnO) = GaP(ZnO)
GaPAs = GaPAs

REMARKS:
For the resulting colours, see AAE564-005.

AAE564-005 **01** **M..17** **A91**
simple non-quantitative code

LED light colour **light colour**
light colour

Code of the colour of the light emitted by a LED or IRED.

green = green
hyper-red = hyper-red
infrared = infrared
orange = orange
standard-red = standard-red
super-red = super-red
ultra-red = ultra-red
yellow = yellow

REMARKS:
For the relevant emitting material, see AAE563-005.

AAE565-005 **02** **NR3..3.3ES2** **L29**
level min real measure
cd

luminous intensity **I_v**
I_v

The minimum luminous intensity of a LED (in cd) at a specified forward current and ambient temperature.

AAE014-005 = ambient temperature
AAE274-005 = forward current

IEC 60306-1 (1969)

AAE566-005 **03** **X..3** **A56**
simple non-quantitative code

radiation type **radiation type**

Code of the type of optical radiation to which a photosensor responds.

IR = infrared radiation
UV = ultraviolet radiation
VIS = visible radiation

IEC 60050(845) (1987)

AAE567-005 **01** **NR3..3.3ES2** **E01**
level min real measure
A/W

spectral sensitivity **s_$l**
s_λ
S_R

The minimum ratio of the photocurrent to the incident radiant power (in A/W), of a photosensor at specified wavelength, reverse voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE335-005 = reverse voltage
AAE569-005 = wavelength at peak value

AAE568-005 **02** **NR3..3.3ES2** **L03**
level nom real measure
m

wavelength at peak response **$l_peak**
peak-response wavelength λ_{peak}

The nominal wavelength (in m) at which the spectral luminous sensitivity of a photosensor is maximum at specified reverse voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE335-005 = reverse voltage

AAE569-005 **02** **NR3..3.3ES2** **L03**
simple real measure
m

wavelength at peak value **@$l_p**
peak-wavelength $@\lambda_p$

The wavelength (in m) of the intensity of a laser photoemitter or responsivity of a photosensor, as a variable.

AAE570-005 **02** **NR3..3.3ES2** **L16**
simple real measure
W/m^2

irradiance **@E_e**
irradiance E $@E_e$

Irradiance applied to a photosensor (in W/m^2), as a variable.

ISO 31-6 (1992)

AAE571-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V/W

responsivity **responsivity**
voltage responsivity responsivity

The nominal ratio of the rms signal to the value of the incident, chopped, radiant power (in V/W) of an infrared radiation photosensor at specified wavelength, chopping frequency and ambient temperature.

AAE014-005 = ambient temperature
AAE569-005 = wavelength at peak value
AAE935-005 = chopping frequency

AAE572-005 **02** **NR3 S..3.3ES2** **L10**
level nom real measure
$W/(Hz^{-1}/2)$

equivalent noise irradiation **NEP**
noise equivalent power NEP

The nominal equivalent noise power (NEP) of an infrared radiation photosensor (in $W/(Hz^{-1}/2)$, at specified wavelength, chopping frequency and bandwidth.

AAE569-005 = wavelength at peak value
AAE934-005 = bandwidth
AAE935-005 = chopping frequency

IEC 60050(531) (1974)

AAE573-005 **01** **NR3..3.3ES2** **L03**
level typ real measure
m

spectral response lower limit **$l_min**
$\lambda_{min:}$

The typical lower limit of the wavelength (in m) above which an infrared radiation photosensor gives a response of at least 90 % of the maximum output, at a specified supply voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE547-005 = supply voltage

REMARKS:
For the lower spectral response, i.e. for the total range, see also AAE574-005.

AAE574-005 **01** **NR3..3.3ES2** **L03**
level typ real measure
m

spectral response upper limit **$l_max**
λ_{max}

The typical upper limit of the wavelength (in m) below which an infrared radiation photosensor gives a response of at least 90 % of the maximum output, at a specified supply voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE547-005 = supply voltage

REMARKS:
For the lower spectral response, i.e. for the total range, see also AAE573-005.

AAE575-005 **02** **NR3..3.3ES2** **T03**
level nom real measure
m

element separation **s_gap**
element gap s_{gap}

The nominal distance (in m) between the sensitive elements of an infrared radiation photosensor.

AAE576-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

element length **l_elem**
l_{elem}

The nominal length (in m) of the sensitive element(s) of an infrared radiation photosensor.

AAE577-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

element breadth **b_elem**
b_{elem}

The nominal breadth (in m) of the sensitive element(s) of an infrared radiation photosensor.

AAE578-005 **01** **NR2 S..3.3** **E06**
level minMax real measure
V

grid 1 voltage for cut-off **V_g1(co)**
control grid voltage $V_{g1(co)}$

The value as specified by level (minMax) of the direct voltage (in V), on grid 1 with respect to the cathode, for visual extinction of the focused raster of a monochrome display tube at nominal grid 2 voltage.

IEC 60050 (531) (1974)

REMARKS:
Applies to grid-driven display tubes.

AAE579-005 **01** **NR2..3.3** **E06**
level nom real measure
V

heater voltage **V_f**
V_f

The nominal rms ac or dc voltage (in V) across the heater terminals of an electron tube.

IEC 60050 (531) (1974)

AAE580-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A

heater current **I_f**
I_f

The nominal rms ac or dc current (in A) flowing through the heater of an electron tube.

IEC 60050 (531) (1974)

AAE581-005 **01** **NR2..3.3** **T03**
level max real measure
m

overall length **l_o**
l_o

The maximum overall length (in m) of a product.

AAE584-005 **01** **NR2 S..3.3** **E06**
level minMax real measure
V

grid 2 voltage for cut-off **V_g2(co)**
$V_{g2(co)}$

The value as specified by level (minMax) of the direct voltage (in V) on grid 2 with respect to grid 1 for visual extinction of the focused spot of a colour display tube at maximum cathode voltage.

REMARKS:
Adjustment procedure:
With all cathodes at maximum voltage, V_{g2} is increased to a value at which one of the colours becomes just visible. Then the cathode voltages of the remaining guns are decreased until the other colours also become visible.

AAE585-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
%

focusing voltage **V_foc**
V_{foc}

The nominal direct voltage (in %) relative to the anode voltage, on grid 3 with respect to grid 1, for focusing of a colour display tube.

AAE586-005 **01** **NR3..3.3ES2** **E06**
level minMax real measure
V

focusing voltage **V_foc**
V_{foc}

The value as specified by level (minMax) of the direct voltage (in V), on grid 4 with respect to grid 1, for focusing of a monochrome display tube.

AAE588-005 **01** **NR1..4** **T01**
level nom integer measure
deg

deflection angle **$a_defl**
α_{defl}

The nominal angle of deflection (in deg) on the diagonal of the useful screen used to identify a display tube.

AAE589-005 **01** **NR2..3.3** **T03**
level nom real measure
m

neck diameter **d_neck**
d_{neck}

The nominal outer diameter (in m) of the neck of a display tube.

AAE590-005 **01** **NR3..3.3ES2** **E06**
level miNoMax real measure
V

anode voltage **V_a**
final accelerator voltage V_a

The value as specified by level (miNoMax) of the direct voltage (in V) on the anode of a display tube.

REMARKS:
All voltages relative to grid 1 (cathode drive) or to cathode (grid drive).

AAE591-005 **01** **NR2 S..3.3** **E06**
level minMax real measure
V

cathode voltage for cut-off **V_k(co)**
cathode voltage $V_{k(co)}$

The value as specified by level (minMax) of the direct voltage (in V), on the cathodes with respect to grid 1, for visual extinction of the focused spot of a colour display tube.

REMARKS:
See AAE584-005 for the adjustment procedure.

AAE592-005 **01** **NR1..4** **T03**
level nom integer measure
cm

screen diagonal **d_scr**
d_{scr}

The nominal projected length of the useful screen diagonal (in cm) of a display tube, used as product identification.

REMARKS:
In the Pro Electron type designation code, for TV picture tubes and monitor tubes, the screen diagonal corresponds with the second (number) symbol, consisting of a two or three-digit number.
For other display tubes see AAE595-005.

AAE593-005 **01** **NR3..3.3ES2** **T03**
level min real measure
m

useful screen horizontal **b_scr**
b_{scr}

The minimum projected width (in m) of the useful screen measured along the horizontal axis of a display tube.

AAE594-005 **01** **NR3..3.3ES2** **T03**
level min real measure
m

useful screen vertical **h_scr**
h_{scr}

The minimum projected height (in m) of the useful screen measured along the vertical axis of a display tube.

AAE595-005 **01** **NR1..4** **T03**
level nom integer measure
cm

tube size (cm) **d_gls(c)**
$d_{gls(c)}$

The nominal overall outer diagonal (in cm) of the glass envelope of a display tube, used as product identification.

REMARKS:
In the Pro Electron type designation code for display tubes other than TV picture and monitor tubes, the face diagonal (in cm) corresponds with the first number.
For TV picture tubes and monitor tubes see AAE592-005.

AAE596-005 **02** **NR2..3.3** **L13**
level nom real measure
%

glass transmission **glass trans**
light transmission glass trans

The nominal quantity of visible light (in %) relative to the quantity of generated light, transmitted through the screen of a display tube.

REMARKS:
Measured at screen centre.

AAE598-005 **01** **M..8** **A58**
simple non-quantitative code

base type **base type**

EIA code of the base type of a display tube.

B10-277 = B10-277
B12-246 = B12-246
B12-262 = B12-262
B7-208 = B7-208
B8-228 = B8-228
B8-274 = B8-274
B8-288 = B8-288
B8H = (neo-eightar/IEC67)
E7-91 = E7-91

AAE603-005 **01** **NR2 S..3.3** **E06**
level minMax real measure
V

cathode voltage for cut-off **V_k(co)**
$V_{k(co)}$

The value as specified by level (minMax) of the direct voltage (in V), on the cathode with respect to grid 1, for visual extinction of the focused raster of a monochrome display tube at minimum grid 2 voltage.

REMARKS:
Applies to cathode-driven display tubes.

AAE605-005 **01** **M..3** **A91**
simple string

phosphor code **phosphor code**

Pro Electron code of the phosphor type(s) of a display tube. REMARK: For codes see table D in naming document.

REMARKS:
1. In the Pro Electron type designation code, the phosphor code corresponds with the fifth (letter) symbol, consisting of a single letter or a two-letter combination.
2. The table gives fluorescent and phosphorescent colours, CIE colour coordinates, persistence and comparable EIA designation.
3. The FIRST LETTER denotes the colour of the fluorescence (or phosphorescence in the case of very long persistence screens) according to the regions of the Kelly Chart; the fluorescent colour is that seen during continuous or pulsating excitation (e.g. raster display) and the phosphorescent colour is that seen after excitation has ceased.
The SECOND LETTER denotes other specific differences in screen properties.
4. For colour TV picture tubes, the phosphor is defined by the letter X or the letters XX.
For colour monitor tubes, the phosphor (usually tri-colour) may be defined by the letter(s) X, XX or some other two-letter combination, excluding the letters I and O.
For monochrome TV picture tubes, the phosphor is defined by the letters WW.
For monochrome monitors, the phosphor may be defined by the letters WW or some other two-letter combination, excluding the letters I and O.

AAE606-005 **01** **M..3** **A56**
simple non-quantitative code

application code **appl code**

Pro Electron/EIA code indicating the primary application of a display tube.

A = TV picture tube
D = oscilloscope tube, single trace
E = oscilloscope tube, double trace
F = radar display tube
L = storage display tube
M = monitor tube
P = projection tube
Q = flying spot scanner
R = recording tube with fibre optic output

Pro Electron (1988)

REMARKS:
In the Pro Electron type designation code, the application code corresponds with the first (letter) symbol and shall consist of a single letter.

AAE607-005 **01** **NR3..3.3ES2** **E22**
level nom real measure
H

line coil inductance **L_H**
L_H

The nominal inductance (in H) of the line deflection coils of a deflection unit, connected in parallel.

REMARKS:
The inductance may include a series-connected loss coil.

AAE608-005 **01** **NR3..3.3ES2** **E22**
level nom real measure
H

field coil inductance **L_V**
L_V

The nominal inductance (in H) of the field deflection coils of a deflection unit, connected in series.

REMARKS:
If connected in parallel the inductance is 4 times lower.

AAE609-005 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

line coil resistance **R_H**
R_H

The nominal dc resistance (in ohms) of the line deflection coils of a deflection unit, connected in parallel.

REMARKS:
The resistance may include the resistance of a series connected loss coil.

AAE610-005 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

field coil resistance **R_V**
R_V

The nominal dc resistance (in ohms) of the field deflection coils of a deflection unit, connected in series.

REMARKS:
If connected in parallel the resistance is 4 times lower.

AAE611-005 **02** **NR3..3.3ES2** **E01**
level nom real measure
A

line deflection current **I_H**
I_H

The nominal peak-to-peak current (in A) to deflect the spot on the screen of a display tube assembly from edge to edge horizontally, at nominal anode voltage.

AAE612-005 **02** **NR3..3.3ES2** **E01**
level nom real measure
A

field deflection current **I_V**
I_V

The nominal peak-to-peak current (in A) to deflect the spot on the screen of a display tube assembly from edge to edge vertically, at nominal anode voltage.

AAE616-005 **02** **NR1..4** **H01**
level miNoMax integer measure
K

thermal sensitivity index B25/75 **B_25/75**
B_25/75 value $B_{25}/75$

The value as specified by level (miNoMax) of the mean temperature sensitivity index (in K) of an NTC thermistor between 25 and 75 Cel.

IEC 60539 (2002)

AAE617-005 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω/s

LDR recovery rate **recovery rate**
recovery rate

The minimum recovery rate of the resistance of a light dependent resistor (in Ω/s) from light to dark, after a specified duration, initial illuminance level and colour temperature.

AAE028-005 = duration
AAE623-005 = colour temperature
AAE624-005 = illuminance

AAE618-005 **01** **M..8** **A56**
simple non-quantitative code

PTC application **PTC application**

Code of a PTC thermistor identifying its application.

DEGA = degaussing colour TV tubes (dual PTC)
HEAT = heating element
MOTOR = motor starting
PROT = overload protection
SENS = temperature sensing

AAE619-005 **01** **NR2..3.3** **E01**
level min real measure
A

PTC peak inrush current **I_peak(inr)**
$I_{peak(inr)}$

The minimum peak alternating inrush current (in A) of a degaussing PTC thermistor at specified ac voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE150-005 = voltage (ac)

AAE620-005 **01** **NR2..3.3** **E01**
level max real measure
A

PTC peak current **I_peak**
I_{peak}

The maximum peak alternating current (in A) of a degaussing PTC thermistor, at specified ac voltage, ambient temperature, and duration after switch-on of the ac voltage.

AAE014-005 = ambient temperature
AAE028-005 = duration
AAE150-005 = voltage (ac)

AAE621-005 **01** **NR2..3.3** **E06**
level max real measure
dB

resistor noise index **F_res**
current-noise index F_{res}

The maximum current-noise index in one frequency decade (in dB), relative to the applied dc voltage, of a fixed linear resistor.

IEC 60195 (1965)

REMARKS:
The current-noise index 'microvolts per volt in a decade' expressed in dB is the term used to express the 'noisiness' of individual resistors.
The ideal rectangular pass band associated with the current-noise index is one frequency decade, geometrically centred at 1000 Hz (c/s).
The index is defined as follows:
Current-noise index = 20 $\log_{10}$ ($v_{rms)}$/V_T dB (in a frequency decade).
Where v_{rms} is the number of microvolts of open circuit rms current-noise voltage in a frequency decade and V_T is the number of dc volts applied to the resistor under test.
Since the current-noise power spectrum approximates to a 1/f frequency characteristic, the index provides an estimate of current-noise in any frequency decade.

AAE622-006 **02** **M..3** **A59**
simple non-quantitative code

pulse shape **@pulse shape**

Code of the shape of a pulse applied to an electric, electronic or electromechanical component as a variable.

REC = rectangular pulse
SQW = square-wave pulse
EXP = exponential or 'full lightning' impulse

REMARKS:
References: full lightning impulse IEC 60060-1 (1989)
rectangular pulse IEC 60050(702) (1992)

AAE623-005 **01** **NR1..4** **H01**
simple integer measure
K

colour temperature **@T_col**
$@T_{col}$

The colour temperature of light (in K) applied to a light dependent resistor, as a variable.

AAE624-005 **02** **NR1..4** **L34**
simple integer measure
lx

illuminance **@E**
@E

The illuminance of light (in lx) applied to a light dependent resistor, as a variable.

AAE625-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

thermistor current **I_TDR**
I_{TDR}

The maximum dc current (in A) through a thermistor at specified dc voltage and ambient temperature.

AAE013-005 = voltage (dc)
AAE014-005 = ambient temperature

AAE626-005 **01** **NR3..3.3ES2** **E33**
level miNoMax real measure
Ω

PTC switching resistance **R_sw**
R_{sw}
R_b

The value as specified by level (miNoMax) of the zero-power resistance (in ohms) of a PTC thermistor corresponding with the switching temperature.

IEC 60738-1 (1998)

REMARKS:
The value of zero-power resistance corresponding to the switching temperature.
NOTE
The switching resistance is expressed with reference to the minimum resistance (R_{min}) by a specified multiplying factor. It may also be expressed as an absolute value of resistance and independent of $R_{min.}$

AAE629-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

PTC residual current **I_res**
I_{res}

The maximum residual current (in A) of a PTC thermistor at specified ac voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE150-005 = voltage (ac)

AAE633-005 **01** **NR3..3.3ES2** **T03**
level max real measure
m

lacquered length **l_lacq**
L_{lacq}

The maximum length (in m) of the body of an electric/ electronic or electromechanical component with axial leads, including the lacquered part of the leads.

AAE634-005 **01** **M..8A57**
simple non-quantitative code

terminal material **terminal mat**

Code of the terminal material of an electric-electronic or electromechanical component.

AgPd = silver-palladium
NiSn = nickel-tin

AAE635-001 **01** **M..17** **A58**
simple string

resistor package code **res package**
envelope code

Code of the package or envelope type of a resistor.

AAE637-005 **01** **M..17** **A58**
simple string

transistor package codetra package
envelope code

Code of the envelope type of a transistor.

AAE638-005 **02** **M..3** **A55**
simple non-quantitative code

transistor polarity **polarity**

The abbreviated name of the type of semiconductor material forming the junctions of a bipolar transistor.

NPN = negative-positive-negative
PNP = positive-negative-positive

REMARKS:
N-type: Extrinsic semiconductor in which the conduction electron density exceeds the mobile hole density.
P-type: Extrinsic semiconductor in which the mobile hole density exceeds the conduction electron density.

AAE640-005 **02** **NR2..3.3** **E01**
level minMax real measure
1

collector current ratio **I_1C/I_2C**
I_{1C}/I_{2C}

The value as specified by level (minMax) of the ratio of the collector currents of a dual bipolar transistor at specified equal collector-base voltages, equal base-emitter voltages and at specified sum of emitter currents.

AAE408-005 = emitter current (dc)
AAE419-005 = collector-base voltage
AAE427-005 = base-emitter voltage

AAE641-005 **02** **NR2..3.3** **E01**
level max real measure
A

collector saturation current **I_Csat**
I_{Csat}

The maximum collector current (in A) at which the collector-emitter and base-emitter saturation voltages of a switching bipolar transistor are given at specified dc saturation current gain and ambient temperature.

NOTE
At I_{Csat} the switching properties should also be characterised in a resistive circuit (t_d, t_r, t_s and t_f) using the same value for $+I_B$ and $-I_B$ as the base current used for V_{Cesat} and $V_{Besat.}$

AAE014-005 = ambient temperature
AAE952-005 = dc current gain sat

AAE642-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A/K

differential current change **$DI/$DT**
|Δ I/Δ T|

The absolute value of the differential current change with temperature (in A/K) of a dual bipolar transistor at specified sum of emitter currents and equal collector-base voltage, within a temperature range, between specified temperatures (T_1 and T_2).

AAE408-005 = emitter current (dc)
AAE419-005 = collector-base voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAE644-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V/K

differential voltage change **$DV/$DT**
|Δ V/Δ T|

The absolute value of the maximum differential voltage change with temperature (in V/K) of a dual bipolar transistor at specified sum of emitter currents and equal collector-base voltage, within a temperature range, specified by the temperatures (T_1 and T_2).

AAE408-005 = emitter current (dc)
AAE419-005 = collector-base voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAE647-005 **02** **NR2..3.3** **E49**
level max real measure
dB

average noise figure **F_AV**
average noise factor F_{AV}
noise figure

The maximum average noise figure (in dB) of a bipolar transistor at specified collector current, collector-emitter voltage, source impedance and bandwidth.

AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE934-005 = bandwidth
AAE936-005 = source impedance

IEC 60747-1 (1983)

REMARKS:
Average noise figure:
Ratio of 1) the total output noise power within an output frequency band when the noise temperature of all input terminations is at the reference noise temperature T_0 at all frequencies that contribute to the output noise, to 2) that part of Item 1) caused by the noise of the signal-input termination within the signal-input frequency band.

AAE648-005 **02** **NR2..3.3** **E49**
level minTypMax real measure
dB

spot noise figure **F**
spot noise factor F
noise figure

The value as specified by level (minTypMax) of the spot noise figure (in dB) of a bipolar transistor at specified collector current, collector-emitter voltage, source impedance and frequency.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE936-005 = source impedance

IEC 60747-1 (1983)

REMARKS:
Spot noise figure:
Ratio of 1) the total output noise power per unit bandwidth (spectral density) at a single output frequency when the noise temperature of all input terminations is at the reference noise temperature T_{no} at all frequencies that contribute to the output noise, to 2) that part of item 1) caused by the noise of the signal-input termination at the signal-input frequency.

AAE655-005 **01** **NR3..3.3ES2** **E09**
level max real measure
F

input capacitance at gate **C_ig**
C_{ig}

The maximum input capacitance (in F) at the gate of an N-channel field-effect transistor at specified drain current, drain-source voltage, gate-source voltage and frequency.

AAE029-005 = frequency
AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage

IEC 60747-8 (2000)

AAE656-005 **02** **NR3..3.3ES2** **E45**
level minTypMax real measure
S

transfer conductance **g_fs**
g_{fs}

The value as specified by level (minTypMax) of the nominal value of the real part of the transfer admittance (in S) of a forward biased field-effect transistor at specified drain current and drain-source voltage.

AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage

AAE657-005 **02** **NR2..3.3** **E49**
level minTypMax real measure
dB

spot noise figure **F**
spot noise factor f
noise figure

The value as specified by level (minTypMax) of the spot noise figure (in dB) of a field-effect transistor at specified drain current, drain-source voltage, gate-source voltage, source impedance and frequency.

AAE029-005 = frequency
AAE367-005 = drain current (dc)
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage
AAE936-005 = source impedance

IEC 60747-1 (1983)

REMARKS:
Spot noise figure:
Ratio of 1) the total output noise power per unit bandwidth (spectral density) at a single output frequency when the noise temperature of all input terminations is at the reference noise temperature T_{no} at all frequencies that contribute to the output noise, to 2) that part of item 1) caused by the noise of the signal-input termination at the signal-input frequency.

AAE682-006 **02** **M..17** **A91**
simple non-quantitative code

level **@level**

Abbreviated name of the value level of a physical quantity, distinguishing it from other possible or allowed values of the same quantity.

miNoMax = minimum/nominal/maximum
minTyp = minimum/typical
minTypMax= minimum/typical/maximum
typMax = typical/maximum
minMax = minimum/maximum

AAE683-005 **02** **M..8A56**
simple non-quantitative code

temperature type **@T type**

IEC code of the type of temperature indicating the specific part of a component, or its environment, to which it applies.

T_mb = mounting base temperature
T_j = junction temperature
T_tp = tie-point temperature
T_amb = ambient temperature
T_case = case (envelope) temperature
T_h = heatsink temperature

REMARKS:
This data element to be used in combination with AAE685-005.

AAE684-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

rate of rise of on-state curr **@dI_T/dt**
@dI_T/dt

The rate of rise of the on-state current (in A/s) in a thyristor, as a variable.

AAE685-005 **01** **NR1 S..4** **H02**
simple integer measure
Cel

temperature **@T**
@T

The temperature (in Cel) of a component, or its environment, as a variable.

REMARKS:
This data element to be used in combination with AAE683-005.

AAE686-005 **03** **M..8** **A55**
simple non-quantitative code

IC technology **IC technology**

Code indicating the semiconductor technology of an IC.

ACL = **advanced CMOS logic
ALS = ***advanced low power Schottky TTL
ASTTL = ***advanced Schottky TTL
BICMOS = bipolar & CMOS combined
BIP = bipolar
CMOS = *complementary MOS
ECL = *emitter coupled logic
FAST = ***Fast TTL
HCMOS = **high speed CMOS
I2L = *integrated injection logic
LSTTL = ***low power Schottky TTL
MIXMOS = NMOS & CMOS combined
MOS = metal oxide semiconductor
NMOS = *N-type MOS
PMOS = *P-type MOS
STDTTL = **standard TTL
STTL = **Schottky TTL
TTL = *transistor transistor logic

AAE687-005 **01** **M..8A59**
simple non-quantitative code

quality approval authority **QA authority**
quality assurance
quality certification

The abbreviated name of the authority for quality certification of products.

AQAP = Allied Quality Assurance Procedure
CECC = Cenelec Electronic Components Committee
IECQ = IEC Quality Assessment System
MIL = Military Standard (USA)

AAE688-005 **02** **NR2..3.3** **H12**
level max real measure
K/W

thermal resistance **R_th**
R_{th}

The maximum operating thermal resistance (in K/W), of an electric-electronic or electromechanical component, of a specified thermal resistance type.

AAE689-005 = thermal resistance type

ISO 31-4 (1992)

AAE689-005 **01** **M..17** **A56**
simple non-quantitative code

thermal resistance type **@R_th(type)**
@$R_{th(type)}$

Code specifying the thermal resistance type of an electric/electronic component.

R_th(h-a) = R_{th} from heatsink to ambient free air
R_th(j-a) = R_{th} from junction to ambient free air
R_th(j-c) = R_{th} from junction to case
R_th(j-h) = R_{th} from junction to heatsink
R_th(j-mb) = R_{th} from junction to mounting base
R_th(j-t) = R_{th} from junction to tie-point
R_th(mb-h) = R_{th} from mounting base to heatsink

REMARKS:
This data element is to be used in combination with AAE688.

AAE690-005 **01** **NR2 S..3.3** **E06**
level minTypMax real measure
V

supply voltage **V_sup**
dc supply voltage V_{sup}

The value as specified by level (minTypMax) of the direct supply voltage, applied to an IC.

REMARKS:
Commonly known supply voltage symbols:
V_{CC} for TTL, NMOS and HCMOS circuits
V_{DD} for CMOS circuits
V_P for analogue circuits
V_{EE} for ECL circuits

AAE691-005 **01** **NR3 S..3.3ES2** **E01**
level minTypMax real measure
A

supply current **I_sup**
dc supply current I_{sup}

The value as specified by level (minTypMax) of the direct supply current of an IC.

REMARKS:
Commonly known supply current symbols:
I_{CC} for TTL, NMOS and HCMOS circuits
I_{DD} for CMOS circuits
I_{GND} for the quiescent power supply current (ground current) of CMOS and HCMOS circuits.
I_P for analogue circuits

AAE692-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

standby current disabled **I_stbD**
I_{stbD}
I_{CCstbD}

The maximum standby supply current (in A) of a combinatorial, sequential or interface function of an IC with the output disabled.

AAE693-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

standby current enabled **I_stbE**
I_{stbE}
I_{CCstbE}

The maximum standby supply current (in A) of a digital combinatorial, sequential or interface IC with the output enabled.

AAE696-005 **01** **X..3 A56**
simple non-quantitative code

tube type **tube type**

Code of the category to which an electron tube belongs.

CRT = display tubes (cathode-ray tube)
GAS = gas filled tubes
PHO = photosensitive tubes
SCC = space charge controlled tubes
SCW = space charge wave tubes

AAE697-005 **01** **NR3..3.3ES2** **E01**
level minTypMax real measure
A

current consumption **I_tot**
I_{tot}

The value as specified by level (minTypMax) of the direct supply current (in A) applied to an amplifier at specified supply voltage and temperature of a temperature type.

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAE698-005 01 NR2..3.3 E06
level minTypMax real measure
dB(mV)

output voltage **V_o**
V_o

The value as specified by level (minTypMax) of the output voltage (in dBmV) of a wideband amplifier at specified supply voltage, intermodulation distortion and temperature of a temperature type.

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE709-005 = intermod distortion d_im

REMARKS:
Intermodulation distortion measured according to the three-tone method:

$V_p = V_o$	f_p = 287.25 MHz
$V_q = V_{o-6}$ dB	f_q = 294.25 MHz
$V_r = V_{o-6}$ dB	f_r = 296.25 MHz

measuring frequency is $f_{(p+q-r)}$ = 285.25 MHz
60 dB(mV) means 60 dB above 1 mV, is 1 V.

AAE699-005 02 NR2 S..3.3 E06
level minTypMax real measure
dB

composite triple beat **CTB**
CTB

The value as specified by level (minTypMax) of the quotient (in dB) of a wideband amplifier of: 1) the sum of frequency components measured at a specified TV channel arising from superposition of any three frequency components when a specified number of adjacent channels have an input signal resulting in an equal output voltage, to 2) the wanted output signal level at specified supply voltage, temperature of a temperature type.

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAE700-005 02 NR2 S..3.3 E06
level minTypMax real measure
dB

2nd-order beat **d_2**
d_2

The value as specified by level (minTypMax) of the quotient (in dB) of a wideband amplifier of: 1) the amplitude of the frequency component arising by the superposition of two input signals with specified amplitude and frequency (or channel) measured at a specified frequency (or channel), and 2) the amplitude of one of two original frequencies at specified supply voltage, temperature and temperature type.

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
Measuring method:

$V_p = V_o$	$f_p = f_1$	(channel p)
$V_q = V_o$	$f_q = f_2$	(channel q)

2nd-order beat measured at $(f_1 + f_{2)}$

AAE701-005 01 NR1 S..4 E06
level minTypMax integer measure
dB

input return losses **S_11**
S_{11}

The value as specified by level (minTypMax) of the complex ratio (in dB) of: 1) a sinusoidal incident current, to 2) the corresponding reflected current at the input of a wideband amplifier at specified supply voltage, input impedance, temperature of a temperature type and a frequency range between specified frequencies (f_1 and f_2).

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE936-005 = source impedance
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

AAE702-005 01 NR1 S..4 E06
level minTypMax integer measure
dB

output return losses S_22
S_{22}

The value as specified by level (minTypMax) of the complex ratio (in dB) of: 1) a sinusoidal incident current, to 2) the corresponding reflected current at the output of a wideband amplifier at specified supply voltage, output impedance, temperature of a temperature type and a frequency range between specified frequencies (f_1 and f_2).

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE938-005 = load impedance
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

AAE703-005 01 NR1 S..4 E06
level minTypMax integer measure
dB

cross modulation Xmod
Xmod

The value as specified by level (minTypMax) of the cross modulation (in dB) measured at the output of a wideband amplifier when a specified number of carrier frequencies, with each an equal output voltage, is applied to the input of the module at specified supply voltage, temperature of a temperature type.

NOTES
1 All carrier frequencies are switched on/off with a duty cycle of 50% and a repetition frequency of:
15,750 kHz for 60 Hz mains frequencies and
15,625 kHz for 50 Hz mains frequencies.

2 100% is specified as 0 dB
1% is specified as -40 dB

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAE704-005 02 NR2..3.3 E49
simple real measure
W

sync output power @P_o(syn)
$@P_{o(syn)}$

The operating sync output power (in W) of a bipolar rf power transistor or wideband amplifier, measured according to the three-tone test method, as a variable.

REMARKS:
Three-tone test method:

vision frequency	f_v	level = -8 dB
sound carrier frequency	f_v + 5.5 MHz	level = -7 dB
sideband signal	f_v – 1.1 MHzl	level = -16 dB
zero level 0 dB corresponds to peak sync level.		

AAE705-005 02 NR2 S..3.3 E49
level minTypMax real measure
dB

slope cable equivalent SL
SL

The value as specified by level (minTypMax) of the difference in power gain (in dB) of a wideband amplifier measured at specified frequencies (f_1 and f_2) of a frequency range, with an optimised cable equivalent impedance, at specified supply voltage and temperature of a temperature range.

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

AAE706-005 03 NR2..3.3 E49
level minTypMax real measure
dB

conformity of frequency response FL
flatness of frequency response FL
flatness

The value as specified by level (minTypMax) of the gain difference (in dB) of a wideband amplifier of the measured power gain and the theoretical calculated power gain with an optimised cable equivalent impedance at specified supply voltage, temperature of a temperature type and a frequency range between specified frequencies (f_1 and f_2).

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

AAE707-005 02 NR2..3.3 E49
level minTypMax real measure
W

peak envelope power PEP PEP
PEP

The value as specified by level (minTypMax) of the peak envelope power (in W) of a bipolar transistor in SSB mode of operation, measured according to the two-signal method, at specified collector-emitter voltage, collector current, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAE708-005 02 NR2..3.3 E49
simple real measure
W

peak envelope power @PEP
@PEP

The value of the peak envelope power (in W) of a bipolar transistor or wideband amplifier in SSB mode of operation, measured according to the two-signal method, as a variable.

AAE709-005 01 NR1 S..4 E06
simple integer measure
dB

intermod distortion d_im @d_im
@d_{im}

The intermodulation distortion (in dB) of a bipolar rf power transistor or wideband amplifier measured according to the three-tone test method, as a variable.

REMARKS:

vision frequency	f_v	level = -8 dB
sound carrier frequency	f_v + 5.5 MHz	level = -7 dB
sideband signal	f_v – 1.1 MHzl	level = -16 dB
zero level 0 dB corresponds to peak sync level.		

AAE710-005 01 NR1 S..4 E06
simple integer measure
dB

intermod distortion d_3 @d_3
@d_3

The intermodulation distortion (in dB) of a bipolar rf power transistor, measured according to the two-tone test method, as a variable.

REMARKS:
Two-tone test method:

f_1 = 28.000 MHz	$V_1 = V_o$ – 6 dB
f_2 = 28.001 MHz	$V_2 = V_o$ – 6 dB
measured harmonic component is	
(f_2 + 1 kHz) – (f_1 – 1 kHz) = 3 kHz	

AAE711-005 01 NR2..3.3 E06
level minTypMax real measure
dB

intermodulation distortion d_im d_im
d_{im}

The value as specified by level (minTypMax) of the intermodulation distortion (in dB) of an rf bipolar power transistor measured according to the three-tone test method at specified sync output power, vision frequency, collector-emitter voltage, collector current and temperature of a temperature type

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE704-005 = sync output power

REMARKS:

vision frequency	f_v	level = -8 dB
sound carrier frequency	f_v + 5.5 MHz	level = -7 dB
sideband signal	f_v – 1.1 MHzl	level = -16 dB
zero level 0 dB corresponds to peak sync level.		

AAE712-005 01 NR2 S..3.3 E06
level minTypMax real measure
dB

intermodulation distortion d_3 d_3
d_3

The value as specified by level (minTypMax) of the third order intermodulation distortion (in dB) of a bipolar rf power transistor measured according to the two-tone test method at specified peak envelope power, frequency, collector-emitter voltage, collector current and temperature of a temperature type

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE708-005 = peak envelope power

REMARKS:
Two-tone test method: f_1 = 28.000 MHz, $V_1 = V_o$ – 6dB f_2 = 28.001 MHz, $V_2 = V_o$ – 6dB measured harmonic component is: (f_2 + 1 kHz) – (f_1 – 1 kHz) = 3 kHz

AAE713-005 02 NR2..3.3 E49
level minTypMax real measure
dB

unilateral power gain G_UM
G_{UM}

The value as specified by level (minTypMax) of the power gain (in dB) of a bipolar transistor, considered as a four-terminal network, conjugately matched at its output terminals, assuming the s_{re} (reverse transmission coefficient at common emitter configuration) is zero at specified collector-emitter voltage, collector current, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

$$G_{UM} = 10 \log \frac{s_{fe}^2}{(1 - s_{ie}^2)(1 - s_{oe}^2)}$$

AAE714-005 03 NR2..3.3 E49
level minTypMax real measure
W

synchronous output power P_o(syn)
$P_{o(syn)}$

The value as specified by level (minTypMax) of the synchronous output power (in W) of a bipolar rf power transistor measured according to the three-tone test method at specified intermodulation distortion, frequency, collector-emitter voltage, collector current and temperature of a temperature type.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE709-005 = intermod distortion d_im

REMARKS:
Three-tone test method:

vision frequency	f_v	level = -8 dB
sound carrier frequency	f_v + 5.5 MHz	level = -7 dB
sideband signal	f_v – 1.1 MHzl	level = -16 dB
zero level 0 dB corresponds to peak sync level.		

AAE715-005 02 NR1..4 E49
level minTypMax integer measure
%

efficiency $h
η

The value as specified by level (minTypMax) of the ratio (in %) of the caloric power in the load of a bipolar power transistor to the total power supplied to the transistor at specified application, frequency, load power, collector current, collector-emitter voltage, and temperature of a temperature type.

AAE029-005 = frequency
AAE406-005 = collector current (dc)
AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
For CW operation the caloric power is equal to P_L.
For SSB operation the caloric power is equal to PEP/2.
The total power supplied to the transistor is V_C x I_C.

AAE716-005 02 NR1 S..4 E06
level minTypMax integer measure
V/V

difference in penetration factor $Dg_os/g_fs
$\Delta\ g_{os}/g_{fs}$

The value as specified by level (minTypMax) of the ratio (in V/V) of the change of gate-source voltage difference to the change of drain-gate voltage of a dual field-effect transistor at specified constant drain current, drain-gate voltage and temperature of temperature type.

AAE367-005 = drain current (dc)
AAE375-005 = drain-gate voltage
AAE683-005 = temperature type
AAE685-005 = temperature

$$\left|\Delta\frac{g_{os}}{g_{fs}}\right| = \frac{d\,\Delta V_{GS}}{d\,V_{DG}}$$

AAE717-005 03 NR1 S..4 E44
level minTypMax integer measure
Ω

difference in transfer impedance |$D1/g_fs|
$|\Delta\ 1/g_{fs}|$

The value as specified by level (minTypMax) of the ratio (in ohms) of the change of gate-source voltage difference to the change of drain current of a dual field-effect transistor at specified constant drain current, drain-gate voltage and temperature of a temperature type.

AAE367-005 = drain current (dc)
AAE375-005 = drain-gate voltage
AAE683-005 = temperature type
AAE685-005 = temperature

$$\left|\Delta\frac{1}{g_{fs}}\right| = \frac{d\,\Delta V_{GS}}{d\,I_D}$$

AAE718-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

HIGH-state input voltage V_IH
input voltage HIGH V_{IH}
HIGH-level input voltage

The value as specified by level (minTypMax) of the HIGH-state dc input voltage (in V), applied to a digital function of an IC at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAE719-005 01 NR2 S..3.3 E06
level minTypMax real measure
V

LOW-state input voltage V_IL
input voltage LOW V_{IL}
LOW-level input voltage

The value as specified by level (minTypMax) of the LOW-state dc input voltage (in V), applied to a digital function of an IC at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAE720-005 02 NR3..3.3ES2 T07
level max real measure
s

access time t_ACC
address to output delay t_{ACC}
access time from RAS t_{RAC}

The maximum access time interval (in s), from address to output, of a memory function of an IC.

NOTE
In the case of a dynamic RAM, it is the time interval (t_{RAC}) between row address strobe and output.

ISO 2382-12 (1988)

AAE721-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

access time from CAS **t_CAC**
t_{CAC}

The maximum time interval (in s) between the application of the CAS (Column Address Strobe) input pulse, other necessary inputs being already present, and the availability of valid data signals at an output of a DRAM.

IEC 60748-2 (1997)

AAE722-007 **02** **X..8 A56**
simple non-quantitative code

storage function **sto function**
memory/register function

Code identifying the storage function of a digital IC.

CAM = content addressable memory Ics
CCD = charge coupled device Ics
RAM = random access memory Ics
REGI = registers
ROM = read only memory Ics

AAE724-005 **01** **X..3 A56**
simple non-quantitative code

trigger device function **trg function**

Code of the function of a trigger device.

DIA = diacs
THY = thyristors
TRI = triacs

AAE725-005 **02** **NR1..4** **E06**
level minMax integer measure
V

breakover voltage **V_(BO)**
$V_{(BO)}$

The value as specified by level (minMax) of the direct voltage (in V) at the breakover point of a diac, which is where the differential resistance is zero and the principal voltage has reached a maximum value, at specified rate of rise of off-state voltage.

AAE727-005 = rate of rise of off-state volt

IEC 60747-6 (2000)

AAE726-005 **01** **NR1 S..4** **E06**
level min integer measure
V

output voltage **V_O**
breakback voltage V_O

The minimum output voltage (in V) of a diac at a specified rate of rise of voltage (dV/dt) and junction temperature.

AAE271-005 = junction temperature
AAE727-005 = rate of rise of off-state volt

AAE727-005 **01** **NR3 S..3.3ES2** **E06**
simple real measure
V/s

rate of rise of off-state volt **@dV_D/dt**
$@dV_D/dt$

The rate of rise (in V/s) of the off-state voltage of a diac or thyristor, as a variable.

AAE728-005 **03** **NR1..4** **E01**
level max integer measure
A

rms on-state current **I_T(RMS)**
$I_{T(RMS)}$

The maximum limiting rms on-state current (in A) flowing from the anode to the cathode in a thyristor or triac.

IEC 60747-6 (2000)

AAE729-005 **03** **NR1..4** **E01**
level max integer measure
A

repetitive peak on-state current **I_TRM**
I_{TRM}

The maximum limiting peak on-state current (in A), including all repetitive transient currents, in a triac or thyristor.

IEC 60747-6 (2000

AAE730-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

non-rep peak on-state current I_TSM
surge on-state current I_{TSM}

The maximum limiting non-repetitive peak on-state current (in A) in a thyristor or triac, at specified duration and mounting-base temperature.

AAE028-005 = duration
AAE272-005 = mounting base temperature

IEC 60747-6 (2000)

AAE731-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

gate current **@I_G**
$@I_G$

The gate current in a thyristor or triac (in A), as a variable.

AAE732-005 **01** **NR3 S..3.3ES2** **E01**
level min real measure
A

gate trigger current **I_GT**
I_{GT}

The minimum gate current (in A) required to switch a thyristor or triac from the off-state to the on-state at specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

IEC 60747-6 (2000)

AAE733-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

on-state current **@I_T**
$@I_T$

The dc on-state current (in A) flowing from anode to cathode in a thyristor or triac, as a variable.

IEC 60747-6 (2000)

AAE734-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A/s

rate of rise on-state current dI_T/dt
dI_T/dt

The maximum limiting rate of rise of on-state current (in A/s) after triggering with a specified gate current to a specified on-state current at a stated rate of rise of the gate current.

AAE731-005 = gate current
AAE733-005 = on-state current
AAE736-005 = rate of rise of gate current

IEC 60747-6 (2000)

AAE735-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A/s

rate of rise of commut current @dI_com/dt
$@dI_{com}/dt$

The rate of rise of the commutating current (in A/s) of a triac, as a variable.

AAE736-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A/s

rate of rise of gate current @dI_G/dt
$@dI_G/dt$

The rate of rise of the gate current (in A/s) of a thyristor or triac, as a variable.

AAE737-005 **01** **NR3 S..3.3ES2** **E06**
simple real measure
V

off-state voltage **@V_D**
$@V_D$

The off-state voltage (in V) between the thyristor or triac anode and cathode, as a variable.

IEC 60747-6 (2000)

AAE738-005 **01** **NR3 S..3.3ES2** **E06**
level max real measure
V

off-state voltage **V_D**
V_D

The maximum limiting continuous voltage (in V) between the thyristor or triac anode and cathode in the off state, excluding repetitive and non-repetitive voltages.

IEC 60747-6 (2000)

AAE739-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V

repetitive peak off-state voltage **V_DRM**
V_{DRM}

The maximum limiting repetitive peak off-state voltage (in V) across a thyristor or triac including all repetitive voltages but excluding all non-repetitive transient voltages.

IEC 60747-6 (2000)

AAE740-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V/s

rate of rise of off-state voltage **dV_D/dt**
dV_D/dt

The maximum rate of rise (in V/s) of the off-state voltage that will not trigger the device at a specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

IEC 60747-6 (2000)

AAE741-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V

rate of rise commutating voltage **dV_com/dt**
dV_{com}/dt
dV_D/dt

The maximum rate of rise (in V/s) of the commutating voltage, immediately following on-state current conduction in the opposite direction, that will not cause switching from the off-state to the on-state at specified values of the rate of rise of commutating current, rms on-state current, off-state voltage and mounting-base temperature.

AAE272-005 = mounting base temperature
AAE735-005 = rate of rise of commut current
AAE737-005 = off-state voltage
AAF063-005 = rms on-state current

IEC 60747-6 (2000)

AAE742-005 **01** **NR3 S..3.3ES2** **E06**
level min real measure
V

gate trigger voltage **V_GT**
V_{GT}

The minimum gate voltage (in V) required to switch a triac or thyristor from the off-state to the on-state at a specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

IEC 60747-6 (2000)

AAE743-005 **01** **X..3** **A56**
simple non-quantitative code

thyristor function **thy function**

Code of the function of a thyristor.

FTO = fast turn off thyristors
GTO = gate turn off thyristors
RVB = reverse blocking thyristors

AAE744-005 **02** **NR3..3.3ES2** **E01**
level max real measure
A

average on-state current **I_T(AV)**
$I_{T(AV)}$

The maximum limiting average dc current (in A) flowing from anode to cathode in the on-state of a thyristor during one mains cycle at a specified mounting base temperature.

AAE272-005 = mounting base temperature

IEC 60747-6 (2000)

REMARKS:
One 50 Hz mains cycle = 20 ms. One 60 Hz mains cycle = 16,7 ms.

AAE745-005 **01** **NR1..4** **E01**
level max integer measure
A

controllable anode current **I_TCRM**
I_{TCRM}

The maximum limiting direct anode current (in A) that can be controlled, i.e. interrupted, in the conducting state by reverse biasing of the gate-cathode voltage in a gate turn off thyristor.

AAE746-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

fall time **t_f**
time constant t_f

The maximum time interval (in s) between 90 % of the on-state current and the moment when this current has decreased to 10 %, at specified values of the on-state current, off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE733-005 = on-state current
AAE737-005 = off-state voltage

AAE747-005 **02** **NR3 S..3.3ES2** **T07**
level max real measure
s

commutated turn-off time **t_q**
t_q

The maximum time interval (in s) between the instant when the on-state current has decreased to zero after external switching of the anode-cathode voltage and the instant when the specified on-state voltage which the thyristor is capable of supporting without turning on, passes through zero with a specified rate of rise of on-state voltage.

AAE683-005 = temperature type
AAE684-005 = rate of rise of on-state curr
AAE685-005 = temperature
AAE727-005 = rate of rise of off-state volt
AAE733-005 = on-state current
AAE737-005 = off-state voltage

IEC 60747-6 (2000)

AAE748-005 **02** **NR3 S..3.3ES2** **E01**
level min real measure
A

cathode-gate to cathode current **I_GKT**
I_{GKT}

The minimum direct cathode-gate to cathode current (in A) that will trigger a tetrode thyristor at specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

AAE749-005 **02** **NR3 S..3.3ES2** **E01**
level min real measure
A

anode-gate to anode current **I_GAT**
I_{GAT}

The minimum anode-gate to anode current (in A) that will trigger a tetrode thyristor at specified off-state voltage, resistance between cathode-gate and gate, and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage
AAE956-005 = resistance

AAE750-005 **02** **NR3 S..3.3ES2** **E06**
level min real measure
V

cathode-gate trigger voltage **V_GKT**
V_{GKT}

The minimum cathode-gate to cathode voltage (in V) that will trigger a tetrode thyristor at a specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

AAE751-005 **02** **NR3 S..3.3ES2** **E06**
level min real measure
V

anode-gate to anode voltage **V_GAT**
V_{GAT}

The minimum anode-gate to anode voltage (in V) that will trigger a tetrode thyristor at specified off-state voltage and junction temperature.

AAE271-005 = junction temperature
AAE737-005 = off-state voltage

AAE752-005 **01** **NR3..3.3ES2** **K01**
level nom real measure
kg

mass **m**
m

The nominal mass (in kg) of a component.

AAE753-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

inside diameter **d_in**
d_{in}

The value as specified by level (miNoMax) of the inside diameter (in m) of a component with a body of circular cross-section.

AAE754-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of terminals **N_term**
number of pins N_{term}

The number of electrical terminals of an electric/ electronic or electromechanical component.

AAE755-005 **02** **NR3..3.3ES2** **E44**
level min real measure
Ω

impedance **|Z_S|**
$|Z_S|$

The minimum value of the modulus of impedance (in ohms) of an inductor at specified frequency.

AAE029-005 = frequency

REMARKS:
Applies to beads threaded on a straight copper wire.

AAE756-005 **02** **NR1..4** **E44**
level max integer measure
dB

impedance decrease **dDZ**
dDZ

The maximum decrease of the modulus of the impedance (in dB), of an inductor, relative to the modulus of impedance at frequency f_1, over a frequency range between specified frequencies (f_1 and f_2).

AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

REMARKS:
Applies to wound six-hole beads.

AAE758-005 **01** **NR3..3.3ES2** **F03**
level nom real measure
Hz

frequency at Z_max **f_Zmax**
f_{Zmax}

The nominal frequency (in Hz) at which the modulus of impedance of an inductor reaches its maximum value.

REMARKS:
Applies to wound six-hole beads.

AAE759-005 **01** **X..3 A57**
simple non-quantitative code

coercivity class **coercivity cl**

Code of the coercivity class of a magnetic part or magnetic material.

HRD = hard magnetic (high coercivity)
SFT = soft magnetic (low coercivity)

AAE760-005 **03** **NR2..3.3** **E36**
level min real measure
Ω/m

resistivity **$r_r**
ρ_r

The minimum dc resistivity (in Ω/m) of a magnetic material.

AAE761-005 **01** **NR1 S..4** **H02**
level min integer measure
Cel

Curie temperature **T_C**
Curie point T_C

The minimum temperature (in Cel) below which a magnetic material is ferromagnetic or ferrimagnetic and above which it is paramagnetic.

NOTE
The change of state is not perfectly sharp, so the above definition may not give a value sufficiently defined for practical purposes. To get a more definite value, the graph of the square of the specific saturation magnetisation (i.e. $sigma^2$) as a function of temperature should be extrapolated to $sigma^2 = 0$. The Curie point may then be taken as the point where this extrapolation meets the temperature axis.

IEC 60050(221) (1990)

AAE762-005 **01** **M..8** **A57**
simple string

hard magnetic material grade hard mat grade

Code of the grade of hard magnetic material according to the manufacturer.

REMARKS:
The material grade code may be used to refer to the magnetic characteristics of a hard magnetic part.

AAE764-005 **01** **M..8** **A57**
simple string

soft magnetic material grade soft mat grade

Code of the grade of soft magnetic material according to the manufacturer.

REMARKS:
The material grade code may be used to refer to the magnetic characteristics of a soft magnetic part.

AAE765-005 **01** **M..17** **A58**
simple string

core size code **core size code**

Code of the shape and size of the core or core halves of a soft magnetic part.

REMARKS:
Code composition:

E-cores :	letter E followed by nominal length/width in mm
EC-cores :	letters EC followed by nominal length in mm
ETD-cores :	letters ETD followed by nominal length in mm
P-cores :	letter P followed by nominal outer diameter/nominal length in mm
RM-cores :	letters RM followed by nominal sidelength of base square in mm
X-cores :	letter X followed by nominal sidelength of base square in mm

Code extension.
Codes may be extended by adding other nominal e.g. height and width.

AAE766-005 **01** **M..3** **A58**
simple non-quantitative code

core shape **core shape**

Code of the shape of a soft magnetic part, or set of parts forming a core.

E = E-core (half)
EC = EC-core (half)
EP = EP-core (set)
ETD = ETD-core (half)
H = H-core (set, together with window- or U-core)
I = I-core (part)
IMP = impeder
MHC = multi-hole-core
P = P-core (set)
PH = PH-core (half)
R = ring-core
RM = square-core(set)
ROD = rod
TUB = tube
U = U-core (half)
X = X-core (set)
YKR = yoke-ring

REMARKS:
For core halves the effective core parameter DETs AAE770-005, AAE771-005, AAE776-005, AAE777-005, AAE782-005 and AAF283-005 are determined in combination with an identical counterpart for I-cores in combination with a U-core.

AAE767-005 **01** **NR1..4** **E17**
simple integer measure
A/m

peak magnetic field strength@H_peak
@H_{peak}

The peak magnetic field strength (in A/m) applied to a magnetic material, as a variable.

AAE768-005 **01** **NR3..3.3ES2** **E19**
simple real measure
T

peak flux density **@B_peak**
peak magnetic flux density @B_{peak}

The peak magnetic flux density (in T) applied to a magnetic material, as a variable.

AAE769-005 01 NR3..3.3ES2 E19
level minTypMax real measure
T

magnetic flux density B
magnetic induction B

The value as specified by level (minTypMax) of the magnetic flux density (in T) of a soft magnetic material at specified frequency, ambient temperature and peak magnetic field strength.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

AAE770-005 01 NR3..3.3ES2 E22
level minTypMax real measure
H

inductance factor A_L
A_L

The value as specified by level (minTypMax) of the inductance (in H) of a coil placed on a soft magnetic part, divided by the square of the number of turns, at specified frequency, ambient temperature and peak flux density.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

$$A_L = \frac{L}{N^2}$$

where L is the inductance of the coil when placed on the core and N is the number of turns on the coil.

IEC 60050 (221) (1990)

AAE771-005 02 NR1..4 E25
level minTypMax integer measure
1

effective permeability $m_e
μ_e

The value as specified by level (minTypMax) of the effective permeability of a soft magnetic part at specified frequency, ambient temperature and peak flux density.

NOTE
Applies to non-homogeneous cores, e.g. cores with an air gap.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

IEC 60050 (221) (1990)

AAE772-005 02 NR1..4 E25
level minTypMax integer measure
1

initial permeability $m_i
μ_i

The value as specified by level (minTypMax) of the limiting value of the amplitude permeability of a soft magnetic material when the magnetic field strength tends to zero.

$$\mu_i = \lim_{H \to 0} \mu_a$$

IEC 60050 (221) (1990)

AAE773-005 02 NR1..4 E25
level minTypMax integer measure
1

amplitude permeability $m_a
μ_a

The value as specified by level (minTypMax) of the relative permeability of a soft magnetic material, obtained from the peak value of the flux density and the applied alternating field strength, at specified frequency, ambient temperature and peak magnetic flux density.

NOTES
1 The peak values apply to the actual waveforms.
2 The material is assumed to be in a cyclic magnetic condition.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

$$\mu_a = \frac{1}{\mu_0} . \frac{B_{peak}}{H_{peak}}$$

IEC 60050 (221) (1990)

AAE775-005 01 NR2..3.3 H07
level max real measure
W

total power loss P_tot
power loss P_{tot}

The maximum total power loss (in W) of a soft magnetic part at specified frequency, ambient temperature and peak flux density.

NOTE
The total loss may include: eddy current loss, hysteresis loss, rotational hysteresis loss, residual loss, gyromagnetic resonance loss.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

IEC 60050 (221) (1990)

AAE776-005 **01** **NR2..3.3** **T03**
level nom real measure
m

effective magnetic path lengthl_e
l_e

The nominal effective magnetic path length (in m) of a soft magnetic part.

NOTE This is the magnetic path length of a hypothetical equivalent toroidal core of the same material properties.

$$l_e = \frac{C_1^2}{C_2}$$

where C_1 is the core factor C_1 (AAE777-005)

and $C_2 = \sum \frac{1}{A^2}$

IEC 60050 (221) (1990)

AAE777-005 **01** **NR2..3.3** **T03**
level nom real measure
m^{-1}

core factor C_1 **C_1**
core inductance parameter C_1

The nominal value (in m^{-1}) of the summation of the quotients of the elements of the magnetic path length over the corresponding cross-sectional areas (in m^{-1}) of a soft magnetic part.

$$C_1 = \sum \frac{1}{A}$$

IEC 60050 (221) (1990)

AAE778-005 **01** **NR2..3.3** **T03**
level miNoMax real measure
m

(air) gap length **l_gap**
gap length l_{gap}

The value as specified by level (miNoMax) of the length of the (air) gap (in m) in the magnetic circuit of a soft magnetic part.

AAE782-005 **02** **NR3..3.3ES2** **T05**
level nom real measure
m^2

effective cross-sectional area A_e
A_e

The nominal effective cross-sectional area (in m^2) of a soft magnetic part.

NOTE This is the cross-sectional area of a hypothetical equivalent toroidal core of the same material properties.

$$A_e = \frac{C_1}{C_2}$$

where C_1 is the core factor C_1 (AAE777-005)

and $C_2 = \sum \frac{1}{A^2}$

IEC 60050 (221) (1990)

AAE785-005 **02** **M..3** **A56**
simple non-quantitative code

signal type **signal type**

Code of the type of signal applied to an electric, electronic or electromechanical component.

AUD = audio
B/W = **black and white
CHR = ***chrominance
COL = **colour
DATA = digital data
LUM = ***luminance
MCH = **monochrome
MON = *mono
SPE = *speech
STE = *stereo
TV = *television
VID = video

AAE786-005 **01** **M..8** **A56**
simple non-quantitative code

mode of operation **operation mode**

Code of the mode of operation of a function of an IC.

ASYN = asynchronous
BID = bidirectional
DOWN = down
DUPL = duplex
PAR = parallel
SER = serial
SIMP = simplex
SYN = synchronous
UNI = unidirectional
UP = up

AAE787-005 **02** **M..8** **A56**
simple non-quantitative code

input/output characteristic I/O char

Code of the input or output characteristic of a digital IC function.

3-ST = three-state
ADDRES = addressable
BUF = buffered
DARL = darlington
I2C = I2C-bus capability
INV = inverting
LTCH = latching
NONINV = non-inverting
O-COL = open collector
O-DRN = open drain
TOTEM = totem pole
UNBUF = unbuffered

AAE788-005 **01** **M..3** **A56**
simple non-quantitative code

AD function **AD function**

Code identifying an analogue/digital signal function of an IC.

ADC = analogue-digital converter
DAC = digital-analogue converter
SPS = speech synthesizer

AAE789-005 **03** **M..8** **A56**
simple non-quantitative code

periodic/dc function **per/dc function**

Code identifying a periodic or dc function of an IC.

MONO = **monostable
MOTDRI = motor drive
MPVD = *micro power voltage selector
OSC = *oscillator
PLL = *phase locked loop
POW = power supply
PPS = *power pack system
PUL = **pulse
REG = *regulator
SAW = **sawtooth
SH = **sample and hold
SIN = **sinewave
SMPS = *switch-mode power supply
SQUARE = **square wave (multivibrator)
STA = *stabilizer
TIM = timing

AAE790-005 **04** **M..8** **A56**
simple non-quantitative code

CSI functions **CSI functions**

Code of a combinatorial, sequential or interface function of an IC.

ADDER = *adder
ALU = *arithmetic logic unit
AND = *AND
ARITHM = arithmetic function
BCD = **BCD counter
BDR = *bus driver
BICNT = *binary counter
BIST = bistable trigger element (flip-flop)
BUF = buffer
BUS = *bus communication
CCONV = code converter
CNT = counter
COM = communication (involving a protocol)
COMP = comparator
D = *D-type
DDR = *display driver
DEC = *decoder
DECNT = *decade counter
DEMUX = *demultiplexer
DMAC = **DMA controller
DRI = driver
DSKC = *disk control
EDC = *error detection/correction
ENC = *encoder
GATE = gate
I2C = **I2C bus
INTC = *interrupt controller
INV = *inverter
JK = *JK-type
L = *latch-type
LACG = *look ahead carry generator
LAN = **local area network
LDR = *line driver
LSH = level shifter
MAC = *memory access controller
MM = *memory management
MUX = *multiplexer
NAND = *NAND
NOR = *NOR
OR = *OR
PARCH = *parity checker
REC = receiver
RS232 = *RS232
SCH = Schmitt trigger
SEQ = sequencer
SR = *set/reset type
SUBTR = *subtractor
SWITCH = switch
TRANS = transceiver
UART = *UART
USART = *USART
VME = **VME bus
XNOR = *exclusive-NOR
XOR = *exclusive-OR

AAE804-005 **01** **NR2..3.3** **T03**
level nom real measure
m

screen curvature radius **r_scr**
face-plate radius r_{scr}

The nominal radius (in m) of the screen of a display tube at screen centre.

AAE805-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pixel pitch horizontal **p_pix**
increment size p_{pix}

The nominal horizontal pitch (in m) of the pixels of a colour display tube, determined by the distance between identical phosphor stripes or dots on the screen.

AAE806-005 **02** **NR1..4** **Q56**
level min integer measure
1

horizontal resolution **resolution H**
resolution H

The minimum number of displayable pixels on the screen of a colour display tube in the horizontal direction.

AAE816-005 **02** **M..17** **A58**
simple string

optoelectronic package **opt package**
envelope

Code of the encapsulation of an optoelectronic device.

AAE834-005 **01** **M..175** **A62**
simple string

component description **description**

Description of a component according to the manufacturer.

REMARKS:
Additional to the structured data in other data elements, free text description.

AAE838-005 **01** **M..17** **A58**
simple string

IC package code **IC package code**
envelope code

Code of the package of an IC.

AAE839-005 **01** **M..8** **A56**
simple non-quantitative code

driving method **MUX ratio**
driving mode
multiplex ratio

Code of addressing the liquid crystal display, i.e. the number of segments (with dot matrix displays, the picture elements or pixels) that are connected together, and is given in a ratio value.

0.086111111 = 64
0.111111111 = 100
0.180555556 = 200
0.208333333 = 240
01:01 = DD = direct drive
01:02 = 2
01:03 = 3
01:04 = 4
01:08 = 8
01:16 = 16
01:32 = 32

REMARKS:
1. The number of common electrodes or segments per group determines the multiplex ratio. When the number of segments is n and the multiplex ratio is M then the number of connections used is n/M + M against n + 1 for direct drive.
2. Multiplex drive is when several electrodes of the segments and those of the back-planes are connected together.

AAE840-005 **01** **M..3** **A56**
simple non-quantitative code

quality grade **quality grade**

Code of the quality grade (determined by the permissible storage temperature range) of a liquid crystal display.

10 = commercial grade =
from -25 Cel to +70 Cel.
20 = extended grade =
from -40 Cel to +90 Cel.

AAE841-005 **01** **NR1 S..4** **H02**
level minMax integer measure
Cel

storage temperature **T_stg**
T_{stg}

The value as specified by level (minMax) of the permissible storage temperature (in Cel) of a component.

AAE842-005 **02** **NR2 S..3.3** **E06**
simple real measure
V

operating voltage **@V_oper**
drive voltage $@V_{oper}$

The peak-to-peak value of the ac square wave voltage (in V) applied to a liquid crystal display, as a variable.

AAE843-005 **01** **NR2 S..3.3** **E06**
level max real measure
V

dc voltage component **V_dc**
V_{dc}

The maximum limiting value of the dc component (in V) of the voltage of a liquid crystal display.

AAE844-005 **02** **NR2 S..3.3** **F03**
level minTypMax real measure
Hz

drive frequency **f_drv**
f_{drv}

The value as specified by level (minTypMax) of the frequency (in Hz) of the drive ac voltage of a liquid crystal display at a specified driving method.

AAF264-005 = driving method

AAE845-005 **02** **NR2 S..3.3** **E01**
level minTypMax real measure
A/m^2

specific current consumption **I_s**
activated display area current I_s

The value as specified by level (minTypMax) of the specific current consumption (in A/m^2) of the activated display area of a liquid crystal display at specified driving method, drive frequency of 32 Hz, typical value of the operating voltage and an ambient temperature of 25 Cel.

AAF264-005 = driving method

AAE846-005 **03** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-on time **t_on**
t_{on}

The value as specified by level (minTypMax) of the time (in s) elapsing between the start (10 %) of the input pulse train and the moment the corresponding luminance is 90 % of its maximum value, of a liquid crystal display at specified driving method, typical operating voltage, drive frequency of 32 Hz and a specified ambient temperature.

AAE014-005 = ambient temperature
AAF264-005 = driving method

REMARKS:
t_{on} is the time elapsing between the start of the input pulse train and the moment when the corresponding luminance is 90 % of its maximum value.
t_{on} is also the sum of $t_{d,}$ or $t_{d(on),}$ and t_r (t_d being the delay time and t_r being the rise time).

AAE847-005 **03** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-off time **t_off**
t_{off}

The value as specified by level (minTypMax) of the time (in s) elapsing between the end (90 %) of the input pulse train and the moment the corresponding luminance has dropped to 10 % of its maximum value, of a liquid crystal display at a specified driving method, typical operating voltage, drive frequency of 32 Hz and a specified ambient temperature.

AAE014-005 = ambient temperature
AAF264-005 = driving method

REMARKS:
t_{off} is the time elapsing between the end of the input pulse train and the moment when the corresponding luminance has dropped to 10 % of its maximum value.
t_{off} is also the sum of $t_{s,}$ or $t_{d(off),}$ and t_f (t_s being the storage time and t_f being the fall time).

AAE848-005 **04** **NR2..3.3** **L32**
level min real measure
1

contrast ratio **CNR**
brightness contrast ratio CNR
luminance contrast ratio L_{ctr}

The minimum guaranteed value of the maximum obtainable ratio between the brightness of the light areas to the brightness of the dark areas of a liquid crystal display at specified values of the operating voltage, ambient temperature and viewing angle.

AAE014-005 = ambient temperature
AAE842-005 = operating voltage
AAE993-005 = viewing angle

REMARKS:
The ratio is always a value greater than one. This means that, for a negative image mode, it is the ratio of the brightness of an addressed display zone to the brightness of a non-addressed zone and, for a positive image mode, it is the ratio of the brightness of the non-addressed zone to that of the addressed zone.

AAE849-005 **01** **M..3** **A58**
simple non-quantitative code

display construction **display constr**
layout construction

Code denoting the layout and construction of a liquid crystal display.

A = alphanumeric
B = multifunctional
D = segment
G = dot-matrix display
M = segments
N = alphanumeric display
P = multifunctional display
R = segment display
S = alphanumeric display
T = dot-matrix display
U = multifunctional display
V = multifunctional display
W = dot-matrix display
Z = shutter

AAE850-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

character length **l_char**
l_{char}

The nominal length (in m) of a character of a liquid crystal display module.

REMARKS:
The length is measured in the horizontal direction.

AAE851-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

character height **h_char**
h_{char}

The nominal height (in m) of a character of a liquid crystal display module.

REMARKS:
The height is measured in the vertical direction.

AAE852-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

dot length **l_dot**
l_{dot}

The nominal length (in m) of a dot of a liquid crystal display module.

REMARKS:
The length is measured in the horizontal direction.

AAE853-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

dot height **h_dot**
h_{dot}

The nominal height (in m) of a dot of a liquid crystal display module.

REMARKS:
The height is measured in the vertical direction.

AAE854-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

viewing area length **l_view**
l_{view}

The value as specified by level (miNoMax) of the length (in m) of the viewing area of a liquid crystal display module.

REMARKS:
The length is measured in the horizontal direction.

AAE855-005 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

viewing area height **h_view**
h_{view}

The value as specified by level (miNoMax) of the height (in m) of the viewing area of a liquid crystal display module.

REMARKS:
The height is measured in the vertical direction.

AAE856-005 **01** **M..3** **A58**
simple non-quantitative code

illumination mode **illum mode**
lighting mode

Code of the illumination and image mode of a liquid crystal display.

F = transflective, positive
G = transflective, negative
R = reflective, positive
S = reflective, negative
T = transmissive, positive
U = transmissive, negative

REMARKS:
The mode in which the relevant data are made visible, viz:

Reflective:	ambient light reflected by a diffuse reflector in the LCD.
Transmissive:	display lit from behind by an artificial light source.
Transflective:	combination of both above.
Positive:	image is black and remaining display area is grey when ON.
Negative:	image is grey and remaining display area is black when ON.

AAE857-005 **01** **NR1..4** **K02**
level minMax integer measure
%

operating humidity **RH_amb**
RH_{amb}

The value as specified by level (minMax) of the ambient humidity (in %) relative to saturation humidity of a humidity sensor.

ISO 9346 (1987)

AAE858-005 **01** **NR1..4** **K02**
level minMax integer measure
%

storage humidity **RH_stg**
RH_{stg}

The value as specified by level (minMax) of the storage ambient humidity (in %) relative to saturation humidity of a humidity sensor.

ISO 9346 (1987)

AAE859-005 **01** **NR1..4** **K02**
simple integer measure
%

relative humidity **@RH**
@RH

The ambient humidity (in %) relative to saturation humidity applied to a humidity sensor, as a variable.

NOTES
1 relative humidity: Actual humidity by volume, divided by humidity by volume at saturation, at the same temperature.
2 humidity by volume: Mass of water vapour divided by the volume of the gaseous mixture.

ISO 9346 (1987)

AAE860-005 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

reference capacitance **C_ref**
C_{ref}

The nominal capacitance (in F) of a capacitive humidity sensor at reference conditions.

NOTE
Reference conditions are:
T_{amb} = 25 Cel
RH_{amb} = 43 %
Frequency = 100 kHz

AAE861-005 **02** **NR3..3.3ES2** **E09**
level miNoMax real measure
F

sensitivity **s_H**
s_H

The value as specified by level (miNoMax) of the ratio of capacitance change and ambient relative humidity change (in F/%) in a range between specified relative humidities (RH_1 and RH_2).

AAE953-005 = relative humidity RH_2
AAE954-005 = relative humidity RH_1

AAE862-005 **02** **NR2..3.3** **E06**
level nom real measure
(V/V)/(A/m)

open-circuit sensitivity **s_open**
s_{open}

The nominal value of the ratio of 1) the output voltage and 2) the product of the supply voltage and magnetic field in (V/V)/(A/m) of a semiconductor magnetic field sensor at specified ambient temperature.

AAE014-005 = ambient temperature

REMARKS:
Sensitivity of a magnetic field sensor at specified ambient temperature and expressed in (V/V)/(A/m)

AAE863-005 **01** **NR2 S..3.3** **E17**
level minMax real measure
A/m

magnetic field strength **H**
H

The value as specified by level (minMax) of the magnetic field strength (in A/m) of a magnetic field sensor.

AAE864-005 **02** **M..3** **A56**
simple non-quantitative code

pressure mode **pressure mode**
application mode

Abbreviation of the application mode of a semiconductor pressure sensor.

ABS = absolute
REL = relative; pos/neg with respect to atmospheric pressure

AAE865-005 **01** **NR2..3.3** **E06**
level nom real measure
V/(VPa)

sensitivity **s**
s

The nominal value of the ratio of 1) output voltage and 2) product of supply voltage and the pressure in V/(V*Pa) of a semiconductor pressure sensor at specified ambient temperature.

AAE014-005 = ambient temperature

AAE866-005 **02** **NR2 S..3.3** **K15**
level minMax real measure
Pa

operating pressure **P_oper**
P_{oper}

The value as specified by level (minMax) of the pressure (in Pa) of a pressure sensor.

AAE867-005 **01** **NR2 S..3.3** **E01**
level max real measure
A

output current **I_open**
I_{open}

The maximum dc output current (in A) of a semiconductor inductive proximity sensor at specified supply voltage.

AAE102-005 = supply voltage

AAE868-005 **01** **NR1 S..4** **H02**
level minTypMax integer measure
Cel

substrate temperature **T_s**
T_s

The value as specified by level (minTypMax) of the temperature (in Cel) of the substrate of an inductive proximity sensor.

AAE869-005 **02** **NR1..4** **T03**
level minMax integer measure
%

hysteresis in switching distance **H**
differential travel H
travel in switching distance

The value as specified by level (minMax) of the hysteresis (in %) of the switching distance of an inductive proximity sensor at specified supply voltage and ambient temperature.

AAE014-005 = ambient temperature
AAE102-005 = supply voltage

AAE870-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

substrate length **L_s**
L_s

The nominal total length (in m) of the substrate of an hybrid inductive proximity sensor.

AAE871-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

substrate width **W_s**
W_s

The nominal total width (in m) of the substrate of an hybrid inductive proximity detector.

AAE872-005 **02** **NR1..4** **F03**
level max integer measure
Hz

operating frequency **f_sw**
switching frequency f_{sw}

The maximum switching frequency (in Hz) of the input current, caused by an actuator that causes a switch-over at the output side of a hybrid inductive proximity sensor.

AAE874-005 **01** **NR1..4** **E33**
level nom integer measure
Ω

reference resistance **R_Tref**
R_{Tref}

The nominal resistance (in ohms) of a semiconductor temperature sensor at a specified sensor current at the reference temperature.

AAE945-005 = current (dc)

REMARKS:
Some sensors are polarity-independent.

AAE875-005 **03** **NR2..3.3** **E33**
level nom real measure
1

resistance ratio R_Tamb/R_Tref
R_Tamb/R_Tref
R_{Tamb}/R_{Tref}

The nominal value of the ratio of the ohmic resistances of a temperature sensor at specified ambient temperature and its resistance at the reference temperature.

AAE014-005 = ambient temperature

AAE876-005 **01** **NR2 S..3.3** **H02**
level nom real measure
%/K

temperature coefficient **TC**
TC

The nominal reversible variation (in %/K) in the nominal resistance of a temperature sensor at reference temperature and specified sensor current.

AAE945-005 = current (dc)

AAE877-005 **01** **M..3** **A51**
simple non-quantitative code

working principle **work principle**

Code of the working principle of a delay line.

EL = electric
PE = piezoelectric

AAE878-006 **02** **M..8** **A51**
simple non-quantitative code

delay line type **delay line type**

Code of the type of a delay line.

ACT = active
CAB = cable
IC = integrated circuit
PAS = passive
SAW = surface acoustic-wave
ULTRA = ultrasonic

AAE879-005 **01** **NR3..3.3ES2** **E06**
level max real measure
dB

spurious signal level (3-tau) L_3$t
L_{3T}

The maximum level (in dB) of the spurious signal at the output terminals of a delay line measured at three times the delay time (tau) and relative to the one tau signal at the output terminals at the nominal frequency and at specified reference conditions.

NOTE Reflections are measured using a 5 us long input burst signal.

AAE995-005 = reference conditions

REMARKS:
The one tau signal is the first burst appearing at the output terminals of a delay line at nominal delay with respect to the input signal.

AAE880-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
dB

spurious signal level **L_sig**
L_{sig}

The maximum level (in dB) of the spurious signal at the output terminals of a delay line measured at five and more times the delay time (tau) relative to the one tau signal at the nominal frequency and at specified reference conditions.

NOTE
Reflections are measured using a 5 us long input burst signal.

AAE995-005 = reference conditions

REMARKS:
The one tau signal is the first burst appearing at the output terminals of a delay line at the nominal delay with respect to the input signal.

AAE885-005 **02** **NR3..3.3ES2** **E43**
level nom real measure
deg

phase relation **$f**
phi

The nominal phase difference (in deg) of the output signal to the input signal of a delay line.

AAE886-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

phase delay drift **t_drft**
t_{drft}

The maximum phase delay drift (in s) of a delay line relative to the phase delay time at 25 Cel over the operating temperature range.

AAE887-005 **02** **NR1 S..4** **E49**
level miNoMax integer measure
dB

insertion loss **insertion loss**
insertion gain insertion loss
transducer attenuation

The value as specified by level (miNoMax) of the insertion loss (in dB) of a delay line.

IEC 60050 (702) (1992)

REMARKS:
Insertion loss
The ratio, generally expressed in decibels, of the power at a point in a transmission path to the power at the same point after insertion of a two-port electrical network into the transmission path ahead of this point.
NOTE
If the ratio defining the insertion loss is less than one, its decibel value is negative, and its converse or opposite decibel value called 'insertion gain' may be used.

AAE888-005 **01** **NR3..3.3ES2** **E06**
level minMax real measure
dB

spurious signal level (2-tau) spur 2$t
spur 2τ

The value as specified by level (minMax) of the spurious signal at the output terminals of a comb filter at twice the delay time (tau) and relative to one tau signal at the output terminals at the nominal frequency and at specified reference conditions.

NOTE
Reflections are measured using a 5 us long input burst signal.

AAE995-005 = reference conditions

REMARKS:
Bypassed delay line (used as comb filter).

AAE891-005 **02** **NR1 S..4** **H02**
level minMax integer measure
Cel

ambient temperature **T_amb**
category temperature T_{amb}
T_a

The value as specified by level (minMax) of the ambient temperature (in Cel) of a component.

AAE892-005 **01** **X..3** **A56**
simple non-quantitative code

sensor input quantity **input quantity**

Code of the physical quantity which a sensor converts into an electric signal.

HUM = relative humidity
LGT = light
MGN = magnetic field strength
NCL = nuclear
PRS = pressure
PRX = proximity
TMP = temperature

AAE893-005 **01** **M..3** **A56**
simple non-quantitative code

sensor working principle **work principle**

Code of the principle of working of a sensor.

CAP = capacitive
IND = inductive
MR = magnetoresistive
SEM = semiconductor
TUB = electron tube

AAE895-005 **01** **NR3 S..3.3ES2** **E01**
simple real measure
A

input current **@I_in**
$@I_{in}$

The dc input current (in A) of an IC, as a variable.

AAE896-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

quiescent current **I_q**
quiescent supply current I_q
I_{CC}
I_{DD}

The maximum guaranteed total quiescent dc supply current (in A) of a CMOS or HCMOS digital IC, at specified supply voltage, zero output current and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
Total quiescent supply current per package.
All inputs must either be at zero (GND/V_{SS}) or at supply voltage level (V_{CC}/V_{DD}).

AAE897-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

additional quiescent current **$DI_CC**
additional q-supply current ΔI_{CC}
delta I_CC per input AQSC

The maximum guaranteed additional quiescent dc supply current (in A) per input, of an HCMOS IC, at specified supply voltage, zero output current and a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
Applies to a sub-category of HCMOS circuits with TTL compatible inputs.
Except for the relevant input, to which a voltage of V_{CC} – 2.1 V (V_{OH} for TTL) must be applied, all other inputs must be either be at zero (GND/V_{SS}) or at supply voltage level (V_{CC}).

AAE898-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

input capacitance **C_in**
C_{in}

The value as specified by level (minTypMax) of the capacitance (in F) at the input of an IC.

AAE899-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

HIGH-state input current **I_IH**
HIGH-level input current I_{IH}

The maximum guaranteed HIGH-state dc input current (in A), of a TTL digital function of an IC, at the maximum supply voltage and specified input voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE224-005 = input voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAE900-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

LOW-state input current I_IL
LOW-level input current I_{IL}

The maximum guaranteed LOW-state dc input current (in A), of a TTL digital function of an IC, at the maximum supply voltage, specified input voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE224-005 = input voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAE901-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

HIGH-state supply current I_CCH
supply current I_{CCH}

The maximum guaranteed total HIGH-state dc supply current (in A), of a TTL digital IC, at the maximum supply voltage.

REMARKS:
Total HIGH-state supply current per package. Appropriate input signals (V_{IH} and/or V_{IL}) must be applied to obtain a HIGH-state at all outputs.

AAE902-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

LOW-state supply current I_CCL
supply current I_{CCL}

The maximum guaranteed total LOW-state dc supply current (in A) of a TTL digital IC at the maximum supply voltage.

REMARKS:
Total LOW-state supply current per package. Appropriate input signals (V_{IH} and/or V_{IL}) must be applied to obtain a LOW-state at all outputs.

AAE903-005 **02** **NR3 S..3.3ES2** **E01**
level max real measure
A

off-state supply current I_CCZ
supply current I_{CCZ}

The maximum guaranteed total off-state dc supply current (in A), of a 3-state TTL digital IC, at the maximum supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
Total off-state supply current per package. Appropriate disabling signals must be applied to the relevant inputs.

AAE904-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

fall time **@t_f**
$@t_f$

The fall time (in s) of a step function change (90 % to 10 %) of a signal applied to an electric-electronic or electromechanical component, as a variable.

AAE905-005 **01** **NR3..3.3ES2** **H07**
level min real measure
W/K

dissipation derating factor P_der
P_{der}

The minimum required power dissipation derating factor (in W/K) of an electric-electronic or electromechanical component, at ambient temperatures higher than the rated temperature.

AAE906-005 **01** **NR3..3.3ES2** **E33**
simple real measure
Ω

base-emitter resistance @R_BE
$@R_{BE}$

The resistance (in ohms) connected between base and emitter terminals of a bipolar transistor, as a variable.

AAE907-005 **01** **M..3** **A52**
simple non-quantitative code

stability **stability**

Code of the condition of a relay after the energising quantity is removed.

BIS = bistable
MON = monostable

AAE911-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A

energising current (dc) **I_in(dc)**
$I_{in(dc)}$

The nominal dc current (in A) which, when applied to the coil of a relay, enables it to operate at the reference temperature.

IEC 61810-1 (1998)

AAE912-005 **01** **NR3..3.3ES2** **E01**
level nom real measure
A

energising current (ac) **I_in(ac)**
$I_{in(ac)}$

The nominal ac current (in A) which, when applied to the coil of a relay, enables it to operate at the reference temperature.

IEC 61810-1 (1998)

AAE915-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V

energising voltage (dc) **U_in(dc)**
$U_{in(dc)}$

The nominal dc voltage (in V) which, when applied to the coil of a relay, enables it to operate.

IEC 61810-1 (1998)

AAE916-005 **01** **NR3..3.3ES2** **E06**
level nom real measure
V

energising voltage (ac) **U_in(ac)**
$U_{in(ac)}$

The nominal ac voltage (in V) which, when applied to the coil of a relay, enables it to operate.

IEC 61810-1 (1998)

AAE918-005 **01** **NR3..3.3ES2** **E09**
level max real measure
F

coil-contact capacitance **C_cl(cont)**
$C_{cl(cont)}$

The maximum parasitic capacitance (in F) between a contact member and the coil of a relay.

AAE919-005 **01** **NR3..3.3ES2** **E09**
level max real measure
F

contact capacitance **C_cont**
C_{cont}

The maximum parasitic capacitance (in F) between two contact members of a relay.

AAE920-005 **02** **NR3..3.3ES2** **E33**
level max real measure
Ω

contact resistance **R_cont**
contact-circuit resistance R_{cont}

The maximum resistance (in ohms) of a mated set of contacts of a connector, relay or switch.

NOTE
Measuring procedure according to IEC 61810-7 (1997)

IEC 60050 (581) (1978)

AAE921-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of contact assemblies **N_cont(assy)**
number of poles $N_{cont(assy)}$

The number of contact assemblies of a relay or switch.

AAE922-005 **03** **NR3..3.3ES2** **Q59**
level min real measure
1

mechanical life **N_cycl**
N_{cycl}

The minimum guaranteed number of operating cycles of a relay or switch without electric load.

NOTE
After the test the contact resistance shall be within its tolerance.

AAE923-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

operate time **t_oper**
t_{oper}

The maximum time (in s) between the instant the energising power is applied and the instant the relay completes the specified function.

IEC 61810-1-00 (1998)

AAE924-005 **02** **NR1 S..4** **T07**
level max integer measure
s

release time **t_rel**
t_{rel}

The maximum time (in s) between the instant the energising quantity is applied and the instant when the relay resets.

IEC 61810-7 (1997)

REMARKS:
A relay releases when it changes from its operate condition to its release condition.

AAE925-005 **01** **M..8** **A56**
simple non-quantitative code

contact member force **contact force**

Code of the kind of force applied to the contact member of a relay.

EM = electromechanical relay
REED = reed (magnetic)
THER = thermal electrical relay

AAE926-005 **01** **X..3** **A56**
simple non-quantitative code

actuating quantity **actuating qnty**

Code of the actuating quantity of a switch.

MEC = mechanical switch
REE = reed switch
THE = thermostatic switch

AAE928-005 **02** **NR2..3.3** **E49**
level max real measure
VA

contact power (ac) **P_cont(ac)**
$P_{cont(ac)}$

The maximum switching apparent power (in VA) as a product of the actual ac contact voltage and the actual ac contact current applied in combination to a switch or relay at resistive load.

REMARKS:
The apparent power is less then the product of contact current and contact voltage.

AAE929-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of stable positions **N_stab**
stable positions N_{stab}

The number of stable positions of a switch.

AAE930-005 **02** **NR1 S..4** **T07**
level max integer measure
s

bounce time **t_bnc**
t_{bnc}

The maximum time interval (in s) between the instant when the contact circuit first closes (opens) and the instant when the circuit is finally closed (opened) of a relay or switch.

IEC 60050 (446) (1983)

AAE931-006 **01** **M..8** **A56**
simple non-quantitative code

switch actuation **actuation**

Code of the actuator of a mechanical switch.

CORD = cord-operated
LEVER = lever/toggle
MEM = membrane
PULL = push-pull
PUSH = push-button
ROCKER = rocker button
ROTARY = rotary
SLIDE = slide
TUMBLE = tumbler

AAE932-005 **02** **NR2..3.3** **K09**
level nom real measure
N

actuating force **F_act**
F_{act}

The operating nominal force (in N) on the actuator of a mechanical switch to cause it to change position.

IEC 60050 (581) 1978)

AAE933-005 **01** **NR3..3.3ES2** **E01**
simple real measure
A

current (ac) **@I_ac**
$@I_{ac}$

The rms sinusoidal current (in A) applied to an electric-electronic or electromechanical component, as a variable.

AAE934-005 **01** **NR3..3.3ES2** **F03**
simple real measure
Hz

bandwidth **@B**
@B

The range of frequencies (in Hz) applied to a electric/ electronic or electromechanical component, as a variable.

REMARKS:
See also AAE963-005 AND AAE964-005

AAE935-005 **01** **NR3..3.3ES2** **F03**
simple real measure
Hz

chopping frequency **@f_chop**
$@f_{chop}$

The number of interruptions (in Hz) of a light beam at regular intervals, applied to an optoelectronic device, as a variable.

AAE936-005 **02** **NR2..3.3** **E44**
simple real measure
Ω

source impedance **@|Z_S|**
$@|Z_{S|}$

The modulus of the complex impedance (in ohms) of a source connected to the input of an electric-electronic or electromechanical component, as a variable.

AAE937-005 **01** **NR3..3.3ES2** **T03**
simple real measure
m

tie-point distance **@s_tp-body**
$@s_{tp\text{-}body}$

The distance (in m) measured along the leads from tie point to the body of a diode, as a variable.

AAE938-005 **02** **NR2..3.3** **E44**
simple real measure
Ω

load impedance **@|Z_L|**
$@|Z_{L|}$

The modulus of the complex impedance (in ohms) of a load connected to the output of an electric-electronic or electromechanical component, as a variable.

AAE940-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of cells in series **N_cell**
N_{cell}

The actual number of cells in the series of a battery.

AAE941-005 **02** **NR2..3.3** **E06**
level max real measure
V

voltage during charge **V_chrg**
V_{chrg}

The maximum voltage (in V) of a secondary battery during charge with a constant current of 0,1 times the value of the nominal capacity.

IEC 60050 (482) (2004)

AAE942-005 **02** **NR3..3.3ES2** **T07**
level min real measure
d

storage life **t_stg**
shelf life t_{stg}

The minimum duration of storage (in d) at specified ambient temperature at the end of which a cell or battery retains 80 % of its original capacity.

AAE014-005 = ambient temperature

IEC 60050 (482) (2004)

AAE943-005 **03** **NR3..3.3ES2** **T07**
level minMax real measure
s

charge time **t_chrg**
t_{chrg}

The value as specified by level (minMax) of the time (in s) after which a discharged secondary battery attains the fully charged state at specified ambient temperature and at specified direct current.

AAE014-005 = ambient temperature
AAE945-005 = current (dc)

IEC 60050 (482) (2004) derived

AAE944-005 **02** **NR1..4** **Q56**
level max integer measure
1

number of charge cycles **N_chrg**
cycle life N_{chrg}

The maximum number of charge/discharge cycles at the end of which the secondary battery retains 80 % of its nominal capacity at specified duration.

AAE028-005 = duration

AAE945-005 **01** **NR3..3.3ES2** **E01**
simple real measure
A

current (dc) **@I_dc**
$@I_{dc}$

The direct current (in A) applied to an electric, electronic or electromechanical component, as a variable.

AAE952-005 **02** **NR1..4** **E01**
simple integer measure
1

dc current gain sat **@h_FEsat**
forced gain $@h_{FEsat}$

The dc current gain in the saturation condition of a bipolar transistor, as a variable.

AAE953-005 **01** **NR1..4** **K02**
simple integer measure
%

relative humidity RH_2 **@RH_2**
$@RH_2$

The upper relative humidity RH_2 of the humidity range applied to a humidity sensor, as a variable.

AAE954-005 **01** **NR1..4** **K02**
simple integer measure
%

relative humidity RH_1 **@RH_1**
$@RH_1$

The lower relative humidity RH_1 of the humidity range applied to a humidity sensor, as a variable.

AAE955-005 **03** **NR2..3.3** **E49**
simple real measure
W

output power **@P_L**
load power $@P_L$

The output power (in W) of an electric-electronic or electromechanical component, as a variable.

IEC 60050 (713) (1998)

AAE956-005 **01** **NR3..3.3ES2** **E33**
simple real measure
Ω

resistance **@R**
@R

The resistance (in ohms) applied to the terminals of an electric-electronic component, as a variable.

AAE957-005 **01** **NR3..3.3ES2** **E09**
simple real measure
F

capacitance **@C**
@C

A value of a capacitance (in F) applied to the terminals of an electric, electronic or electromechanical component, as a variable.

AAE958-005 **01** **NR1 S..4** **H02**
simple integer measure
Cel

temperature T_1 **@T_1**
@T_1

The lower temperature T_1 (in Cel) of the temperature range applied to a component, as a variable.

REMARKS:
See AAE959-005 for upper temperature T_2. If T_2 is left blank the upper limit of the range is determined by the maximum operating temperature. Equal values of T_1 and T_2 may be used to indicate a single specific temperature.

AAE959-005 **01** **NR1 S..4** **H02**
simple integer measure
Cel

temperature T_2 **@T_2**
@T_2

The upper temperature T_2 (in Cel) of the temperature range applied to a component, as a variable.

REMARKS:
See AAE958-005 for lower temperature T_1. If T_1 is left blank the lower limit of the range is determined by the minimum operating temperature. Equal values of T_1 and T_2 may be used to indicate a single specific temperature.

AAE960-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

ripple current **I_rppl**
I_{rppl}

The maximum rms alternating current (in A) of specified frequency which may be applied continuously to a fixed electrolytic capacitor at specified ambient temperature.

AAE014-005 = ambient temperature
AAE029-005 = frequency

AAE961-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

voltage V_1 **@V_1**
@V_1

The lower voltage V_1 (in V) of the voltage range applied to an electric-electronic or electromechanical component, as a variable.

AAE962-005 **01** **NR2 S..3.3** **E06**
simple real measure
V

voltage V_2 **@V_2**
@V_2

The upper voltage V_2 (in V) of a voltage range applied to an electric-electronic or electromechanical component, as a variable.

AAE963-005 **01** **NR3..3.3ES2** **F03**
simple real measure
Hz

frequency f_1 **@f_1**
@f_1

The lower frequency f_1 (in Hz) of the frequency range applied to an electric-electronic or electromechanical component, as a variable.

AAE964-005 **01** **NR3..3.3ES2** **F03**
simple real measure
Hz

frequency f_2 **@f_2**
@f_2

The upper frequency f_2 (in Hz) of the frequency range applied to an electric-electronic or electromechanical component, as a variable.

AAE965-005 **01** **M..8A83**
simple non-quantitative code

component status **status**

Code of the status of a component according to the manufacturer.

DEV = development type
MAINT = maintenance type
PROD = production type or current type

AAE966-005 **01** **NR2..3.3** **E01**
level max real measure
A

average forward current **I_F(AV)**
$I_{F(AV)}$

The maximum average forward current (in A) of a rectifier diode or signal diode at specified temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature

AAE968-005 **01** **M..35** **A56**
simple string

complementary type **complement type**

Manufacturer's type number code of a transistor with reverse polarity, complementary to the transistor under consideration.

REMARKS:
NPN (N-channel) equivalent of a PNP (P-channel) transistor and vice versa.

AAE969-005 **01** **M..17** **A55**
simple string

amplifier package **amp package**
envelope

Code of the package of an amplifier.

AAE971-007 **01** **X..8** **A56**
simple non-quantitative code

signal handling type **signal handling**

Code of the signal handling type of a transistor.

POWT = power signal transistor
SIGT = small signal transistor

AAE973-005 **01** **M..8** **A55**
simple non-quantitative code

FET-technology **FET technology**

Code of the technology of a field-effect transistor.

JFET = junction FET
MOSFET = metal oxide semiconductor FET

AAE974-005 **02** **NR2 S..3.3** **E06**
level max real measure
1

input standing wave ratio **VSWR_in**
$VSWR_{in}$

The maximum voltage standing wave ratio at the input of an amplifier at specified values of supply voltage, temperature of a temperature type and frequency range between specified frequencies (f_1 and f_2).

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

REMARKS:
The source and load impedance are assumed to be equal to the characteristic impedance.

AAE975-005 **02** **NR2 S..3.3** **E06**
level max real measure
1

output standing wave ratio **VSWR_out**
$VSWR_{out}$

The maximum voltage standing wave ratio at the output of an amplifier at specified values of supply voltage, temperature of a temperature type and frequency range between specified frequencies (f_1 and f_2).

AAE102-005 = supply voltage
AAE683-005 = temperature type
AAE685-005 = temperature
AAE963-005 = frequency f_1
AAE964-005 = frequency f_2

REMARKS:
The source and load impedance are assumed to be equal to the characteristic impedance.

AAE976-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

rise time **t_r**
t_r

The value as specified by level (minTypMax) of the time (in s), measured between the 10 % value and the 90 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and gate-source resistance are assumed to be 50 Ω.
2. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE977-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

fall time **t_f**
t_f

The value as specified by level (minTypMax) of the time (in s), measured between the 90 % value and the 10 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and the gate-source resistance are assumed to be 50 Ω.
2. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE978-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-on time **t_on**
t_{on}

The value as specified by level (minTypMax) of the time (in s), measured between the 10 % value of the gate-source voltage change and the 90 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and the gate-source resistance are assumed to be 50 Ω.
2. $t_{on} = t_d + t_r$.
3. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE979-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-off time **t_off**
t_{off}

The value as specified by level (minTypMax) of the time (in s), measured between the 90 % value of the gate-source voltage change and the 10 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and the gate-source resistance are assumed to be 50 Ω.
2. $t_{off} = t_{d(off)} + t_f$. $t_{d(off)}$ is also known as t_s (storage time).
3. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE980-005 02 NR3..3.3ES2 T07
level minTypMax real measure
s

delay (on) time **t_d(on)**
$t_{d(on)}$
t_d

The value as specified by level (minTypMax) of the time (in s), measured between the 10 % value of the gate-source voltage change and the 10 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and gate-source resistance are assumed to be 50 Ω.
2. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE981-005 02 NR3..3.3ES2 T07
level minTypMax real measure
s

delay (off) time **t_d(off)**
$t_{d(off)}$
t_s

The value as specified by level (minTypMax) of the time (in s), measured between the 90 % value of the gate-source voltage change and the 90 % value of the drain current swing of a field-effect transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
1. The internal generator resistance and the gate-source resistance are assumed to be 50 Ω.
2. $t_{d(off)}$ is also known as t_s (storage time).
3. The reference conditions at specifying times for field-effect transistors are normally:
   – drain-source voltage
   – gate-source voltage
   – drain current (dc)
   – reference temperature

AAE982-005 03 NR3..3.3ES2 E09
level minTypMax real measure
F

input capacitance **C_iss**
short-circuit input capacitance C_{iss}

The value as specified by level (minTypMax) of the guaranteed capacitance (in F) between gate and source connections, with drain-source connections short-circuited for ac voltage, of a field-effect transistor at specified frequency, drain-source voltage, and gate-source voltage.

AAE029-005 = frequency
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage

IEC 60747-8 (2000)

AAE983-005 03 NR3..3.3ES2 E09
level minTypMax real measure
F

output capacitance **C_oss**
short-circuit output capacitance C_{oss}

The value as specified by level (minTypMax) of the guaranteed capacitance (in F) between drain and source connections, with gate-source connections short-circuited for ac voltage, of a field-effect transistor at specified frequency, drain-source voltage, and gate-source voltage.

AAE029-005 = frequency
AAE376-005 = drain-source voltage
AAE381-005 = gate-source voltage

IEC 60747-8 (2000)

AAE984-005 01 NR3..3.3ES2 T03
level nom real measure
m

digit height **h_dig**
h_{dig}

The nominal height (in m) of a digit of a liquid crystal display.

REMARKS:
The height is measured in the vertical direction.

AAE985-005 **02** **M..8** **A62**
simple non-quantitative code

connection method **connection**

Code of the method of a connection to a liquid crystal display.

FIXPIN = fixed pin
FOIL = foil
RUBBER = conductive rubber

AAE986-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

dot spacing **dot spacing**
dot spacing

The nominal space (in m) between two adjacent dots of a liquid crystal display module.

AAE987-005 **02** **NR3..3.3ES2** **E49**
level max real measure
W

power consumption **P_cons**
P_{cons}

The maximum guaranteed power consumption (in W) of an electric/electronic or electromechanical component.

AAE989-005 **01** **M..17** **A62**
simple string

backlight **backlight**

The product code of a backlight used with a liquid crystal display module.

AAE990-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F/m^2

specific capacitance **C_s**
C_s

The value as specified by level (minTypMax) of the specific capacitance (in F/m^2) between segment and back-plane of a liquid crystal display at the typical operating voltage, drive frequency of 32 Hz, ambient temperature of 25 Cel and specified driving method.

AAF264-005 = driving method

AAE991-005 **01** **M..17** **A58**
simple non-quantitative code

preferred viewing direction **view direction**

Code of the viewing direction of a liquid crystal display.

10 o'clock = 150 deg in the plane of the LCD.
12 o'clock = 90 deg in the plane of the LCD.
3 o'clock = 0 deg in the plane of the LCD.
5 o'clock = 300 deg in the plane of the LCD.
6 o'clock = 270 deg in the plane of the LCD.
9 o'clock = 180 deg in the plane of the LCD.

REMARKS:
During the manufacturing process the orientation layers of an LCD can be treated so that a so-called preferred viewing direction can be built in. In this direction the display contrast is maximum. A 6 o'clock view means a preferred view from below (270 deg in the plane of the LCD), whereas a 12 o'clock (or 90 deg) preferred view implies a preference from above. The exact elevation angle is not taken into account.

AAE992-005 **02** **NR2 S..3.3** **E06**
level minTypMax real measure
V

operating voltage **V_oper**
drive voltage V_{oper}

The value as specified by level (minTypMax) of the peak-to-peak ac square-wave voltage (in V) to be applied to a liquid crystal display, at specified driving method, drive frequency of 32 Hz and ambient temperature of 25 Cel.

AAF264-005 = driving method

AAE993-005 **02** **NR2..3.3** **T01**
simple real measure
deg

viewing angle **@$a_view**
$@\alpha_{view}$

Angle (in deg) between viewing direction and the perpendicular to the plane of the liquid crystal display, as a variable.

AAE994-005 **01** **NR3..3.3ES2** **E01**
simple real measure
A

reverse current **@I_R**
$@I_R$

The direct current (in A) flowing through a diode or optoelectronic device, in the reverse direction, as a variable.

AAE995-005 **02** **M..175** **A59**
simple string

reference conditions **@reference cond**

Description of the reference conditions applied to a component as a variable.

NOTE
Reference conditions may be used when a number of characteristics are specified at a common set of conditions.

AAE996-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of sections **N_sect**
N_{sect}

The number of sections of a capacitive antenna.

REMARKS:
Applies to extendible antennas.

AAE997-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

extended length **l_ext**
l_{ext}

The nominal length (in m) of a capacitive antenna when all sections are in the extended position.

AAE998-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

non-extended length **l_next**
l_{next}

The nominal length (in m) of a capacitive antenna when all sections are in the non-extended position.

AAF014-005 **03** **M..8A56**
simple non-quantitative code

driving feature **drive feature**

Code of the driving feature of a component.

CROSDR = crossed recessed
HEX = hexagon
HEXSKT = hexagon socket
PHILL = *phillips
POZI = *pozidriv
SLOT = slotted
SQUARE = square
SUPA = *supadriv
TORX = torx
X = **type X

REMARKS:
For electric-electronic components the values hexagon, crossed recessed and slotted are valid.

AAF043-005 **03** **M..35** **A61**
simple string

national standard **nat standard**

Reference to a regional or national standard describing a component.

REMARKS:
AFNOR = Association Francaise de Normalisation
ANSI = American National Standards Institute
ASTM = American Society for Testing and Materials
BEC = Belgisch Elektrotechnisch Comite
BIN = Belgisch Instituut voor Normalisatie
BSI = British Standards Institution
CSA = Canadian Standards Association
DIN = Deutsches Institut fur Normung
MIL = Military specification
NNI = Nederlands Normalisatie Instituut
UL = Underwriters Laboratories
UNE = Instituto Nacional de Racionalizacion y Normalizacion (IRANOR)
UNI = Ente Nazionale Italiona di Unificiazione

AAF044-005 **02** **NR3..3.3ES2** **E44**
level nom real measure
Ω

output impedance **|Z_out|**
$|Z_{out}|$

The nominal value of the modulus of the output impedance (in ohms) of a filter at specified frequency.

AAE029-005 = frequency

IEC 60050 (131) (2002)

AAF045-005 **02** **NR2..3.3** **K09**
level max real measure
N

engaging force **F_eng**
insertion force F_{eng}

The maximum force (in N) required to engage a connector with its mating part.

NOTE
This force includes the effect of a coupling, locking or similar device.

IEC 60050 (581) (1978)

AAF046-005 **02** **NR2..3.3** **K09**
level min real measure
N

separating force **F_sep**
withdrawal force F_{sep}

The minimum force (in N) required to separate a connector from its mating part.

NOTE
This force includes the effect of a coupling, locking or similar device.

IEC 60050 (581) (1978)

AAF047-005 **02** **M..3** **A56**
simple non-quantitative code

screening **screening**

Code of the screening of a transformer.

PRI = primary
SEC = secondary

AAF048-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of primary coils **N_pri(coil)**
$N_{pri(coil)}$

The number of primary coils of a power transformer or relay.

AAF049-005 **01** **NR3..3.3ES2** **F03**
level nom real measure
m/s

speed **v_mot**
v_{mot}

The nominal speed (in m/s) of a linear motor.

AAF050-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

release voltage (ac) **U_rel(ac)**
$U_{rel(ac)}$

The maximum ac voltage (in V) at which an energised relay releases.

IEC 61810-7 (1997)

AAF051-005 **01** **M..8** **A58**
simple non-quantitative code

locking device **locking device**

Code of the locking device of a connector.

BAYON = bayonet
SCREW = screw
SNAP = snap (clic)

IEC 60050 (581) (1978)

AAF052-005 **01** **NR3..3.3ES2** **F03**
level miNoMax real measure
Hz

resonance frequency **f_rsn**
f_{rsn}

The value as specified by level (miNoMax) of the resonance frequency (in Hz) of an inductor.

AAF053-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

terminal length beside housing **l_term**
l_{term}

The nominal length (in m) of that part of a terminal of a right angle or 45 degree connector that is beside the housing.

AAF055-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

delay (off) time **t_d(off)**
carrier storage time $t_{d(off)}$
t_s

The value as specified by level (minTypMax) of the time (in s), measured between the 90 % value of the input pulse and the 90 % value of the corresponding output pulse of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
The reference conditions at specifying times for bipolar transistors are normally:
– supply voltage
– collector current
– base current
– reference temperature

AAF056-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

delay (on) time **t_d(on)**
delay time $t_{d(on)}$
t_d

The value as specified by level (minTypMax) of the time (in s), measured between the 10 % value of the input pulse which is switching-on the transistor, and the 10 % value of the corresponding output pulse of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
The reference conditions at specifying times for bipolar transistors are normally:
– supply voltage
– collector current
– base current
– reference temperature

AAF057-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

fall time **t_f**
t_f

The value as specified by level (minTypMax) of the time (in s) required for the output pulse to fall from a stated high percentage (usually 90 %) to a stated lower percentage (10 %) of its maximum value, of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
The reference conditions at specifying times for bipolar transistors are normally:
– supply voltage
– collector current
– base current
– reference temperature

AAF058-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

rise time **t_r**
t_r

The value as specified by level (minTypMax) of the time (in s) required for the output pulse to rise from a stated low percentage (usually 10 %) to a stated higher percentage (90 %) of its maximum value, of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

REMARKS:
The reference conditions at specifying times for bipolar transistors are normally:
– supply voltage
– collector current
– base current
– reference temperature

AAF059-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-off time **t_off**
t_{off}

The value as specified by level (minTypMax) of the time (in s) elapsing between the end of the input pulse (at least 90 % of its maximum value) and the moment the corresponding output signal falls to 10 % of its maximum value, of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

IEC 60747-8 (2000)

REMARKS:
1. $t_{off} = t_s + t_f$.
2. The reference conditions at specifying times for bipolar transistors are normally:
   – supply voltage
   – collector current
   – base current
   – reference temperature

AAF060-005 **02** **NR3..3.3ES2** **T07**
level minTypMax real measure
s

turn-on time **t_on**
t_{on}

The value as specified by level (minTypMax) of the time (in s) elapsing between the start of the input pulse (usually 10% of its maximum value) and the moment the corresponding output signal is at least 90 % of its maximum value, of a bipolar transistor at reference conditions.

AAE995-005 = reference conditions

IEC 60747-8 (2000)

REMARKS:
1. $t_{on} = t_d + t_r$.
2. The reference conditions at specifying times for bipolar transistors are normally:
   – supply voltage
   – collector current
   – base current
   – reference temperature

AAF061-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

step length **l_step**
l_{step}

The nominal length (in m) between adjacent step positions of a linear stepping motor.

AAF062-005 **02** **NR3..3.3ES2** **K09**
level max real measure
N

holding force **F_hold**
F_{hold}

The maximum steady force (in N) that can be externally applied to the armature of an excited linear stepping motor without causing continuous stepping.

AAF063-005 **02** **NR1..4** **E01**
simple integer measure
A

rms on-state current **@I_T(RMS)**
$@I_{T(RMS)}$

The rms on-state current (in A) flowing from the anode to the cathode in a thyristor or triac, as a variable.

IEC 60747-6 (2000)

AAF064-005 **02** **NR3..3.3ES2** **L29**
level minTypMax real measure
W/sr

radiant intensity **I_e**
I_e

The value as specified by level (minTypMax) of the radiant intensity (in W/sr) of an infrared emitting diode at specified forward current and temperature of a temperature type.

AAE274-005 = forward current
AAE683-005 = temperature type
AAE685-005 = temperature

AAF065-005 **02** **NR3..3.3ES2** **L10**
level typ real measure
W

total radiant output power **$f_e**
radiant flux φ_e
P_{out}

The typical total radiant output power (in W) of an infrared emitting diode at specified forward current and temperature of a temperature type.

AAE274-005 = forward current
AAE683-005 = temperature type
AAE685-005 = temperature

AAF066-005 **02** **NR3 S..3.3ES2** **E06**
level min real measure
V

collector-emitter breakdown voltage **V_(BR)CEO**
$V_{(BR)CEO}$

The minimum breakdown voltage (in V) between collector and emitter terminals of a bipolar transistor or photocoupler when the collector terminal is biased in the reverse direction with respect to the emitter terminal and when the base terminal is open-circuited, at specified collector current and temperature of a temperature type.

AAE406-005 = collector current (dc)
AAE683-005 = temperature type
AAE685-005 = temperature

JESD 77B (2000)

REMARKS:
The collector terminal is considered to be biased in the reverse direction when it is made positive for NPN transistors or negative for PNP transistors with respect to the emitter terminal.

AAF090-005 **02** **NR3..3.3ES2** **E33**
level max real measure
Ω

dc resistance **R_dc**
R_{dc}

The maximum resistance to direct current (in ohms) of a coil of a wirewound component.

REMARKS:
Examples of wirewound components:
inductor, moving conductor loudspeaker, motor, relay, transformer.

AAF096-005 **01** **M..8** **A59**
simple non-quantitative code

stability test **@stab test**

Code of the type of stability test to which a component is submitted.

CLIM = climatic test
LOAD = load test
OVERL = short time overload

AAF097-005 **02** **NR2..3.3** **E33**
level max real measure
%

stability after test **stability**
stability

The ratio (in %) of a) the maximum difference of the resistance of a resistor before and after a specified test to b) the resistance before the test, according to document IEC 60115-1 (1999).

AAF096-005 = stability test

AAF098-005 **01** **M..8** **A51**
simple non-quantitative code

power transformer application **application**

Code indicating the application of a fixed power transformer.

DRI = line deflection driver transformer
LDO = line deflection output transformer
SAFETY = safety transformer
SMPS = switched mode power supply transformer
SUPPLY = supply transformer

AAF099-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of secondary coils **N_sec(coil)**
$N_{sec(coil)}$

The number of secondary coils of a power transformer.

AAF100-005 **01** **NR2 S..3.3** **E33**
level nom real measure
%

resistance tolerance **R_tol**
R_{tol}

The nominal tolerance on resistance (in %) identifying a resistor.

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAF101-006 **01** **X..3** **A56**
simple non-quantitative code

multiplicity **multiplicity**

Code of the multiplicity of a fixed linear resistor.

MUL = linear resistor networks
SIN = single linear resistors

AAF102-005 **01** **M..3** **A56**
simple non-quantitative code

resistor interconnection **interconnection**

Code of the type of interconnection of a fixed linear resistor network.

COM = common terminal
DIV = divider
ISO = isolated
LAD = ladder
TER = terminator

AAF103-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

current dc **I_dc**
I_{dc}

The maximum dc current (in A) of an electric-electronic or electromechanical component at specified ambient temperature.

AAE014-005 = ambient temperature

AAF106-005 **02** **NR1..4** **E01**
level max integer measure
A

contact current (dc) **I_cont(dc)**
rated operational current (dc) $I_{cont(dc)}$

The maximum dc switching current (in A) of a switch or relay at resistive load.

IEC 60947-1 (2004)

AAF107-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

contact voltage (dc) **U_cont**
rated operational voltage (dc) U_{cont}

The maximum operating rms switching voltage (in V) of a switch or relay at resistive load.

NOTE
The rated voltage is the voltage between the contact members before closing or after opening.

IEC 60127-1 (1988)

AAF109-005 **02** **NR3..3.3ES2** **E01**
level minTypMax real measure
A

collector cut-off current I_CB **I_CBO**
I_{CBO}

The value as specified by level (minTypMax) of the direct current (in A) into the collector terminal of a bipolar transistor when it is biased in the reverse direction with respect to the base terminal and when the emitter terminal is open-circuited, at specified values of collector-base voltage and temperature of a temperature type.

AAE419-005 = collector-base voltage
AAE683-005 = temperature type
AAE685-005 = temperature

JESD 77B (2000)

REMARKS:
The collector terminal is considered to be biased in the reverse direction when it is made positive for NPN transistors or negative for PNP transistors with respect to the emitter terminal.

AAF110-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

emitter cut-off current I_EBO I_EBO
I_{EBO}

The value as specified by level (minTypMax) of the direct current (in A) into the emitter terminal of a bipolar transistor when it is biased in the reverse direction with respect to the base terminal and when the collector terminal is open-circuited, at specified values of emitter-base voltage and temperature of a temperature type.

AAE427-005 = base-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

JESD 77B (2000)

REMARKS:
The emitter terminal is considered to be biased in the reverse direction when it is made positive for NPN transistors or negative for PNP transistors with respect to the base terminal.

AAF112-005 01 NR2 S..3.3 E06
level max real measure
V

emitter-base voltage V_EBO V_EBO
V_{EBO}

The maximum limiting voltage (in V) between emitter and base terminals of a bipolar transistor, at open collector terminal.

JESD 77B (2000)

AAF113-005 02 NR2 S..3.3 E06
level max real measure
V

collector-emitter voltage V_CE V_CEX
V_{CEX}

The maximum limiting direct voltage (in V) between collector and emitter terminals of a bipolar transistor at specified voltage between base and emitter terminals.

AAE427-005 = base-emitter voltage

IEC 60748

AAF114-005 02 NR2 S..3.3 E06
level minTypMax real measure
V

base-emitter saturation voltage V_BEsat
V_{BEsat}

The value as specified by level (minTypMax) of the base-emitter voltage (in V) of a bipolar transistor at specified collector current, base current and temperature of a temperature type.

NOTE
This is the voltage between base and emitter terminals when both the base-emitter and base-collector junctions are forward biased.

AAE406-005 = collector current (dc)
AAE409-005 = base current (dc)
AAE683-005 = temperature type
AAE685-005 = temperature

IEC 60748

AAF115-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

collector cut-off current I_CE I_CES
I_{CES}

The value as specified by level (minTypMax) of the direct current (in A) into the collector terminal of a bipolar transistor when it is biased in the reverse direction with respect to the emitter terminal and when the base terminal is short-circuited to the emitter terminal, at specified values of collector-emitter voltage and temperature of a temperature type.

AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

JESD 77B (2000)

REMARKS:
The collector terminal is considered to be biased in the reverse direction when it is made positive for NPN transistors or negative for PNP transistors with respect to the emitter terminal.

AAF116-005 **02** **NR3..3.3ES2** **E09**
level max real measure
F

collector-base capacitance **C_ob**
C_{ob}

The maximum value of the capacitance (in F) between collector and base terminals of a bipolar transistor in common-base configuration and the emitter terminal open-circuited, at specified values of collector-base voltage, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE419-005 = collector-base voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAF117-005 **03** **NR3..3.3ES2** **E09**
level max real measure
F

emitter-base input capacitance **C_ib**
C_{ib}

The maximum value of the capacitance (in F) between emitter and base terminals of a bipolar transistor in common-base configuration and collector terminal open-circuited, at specified values of emitter-base voltage, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE427-005 = base-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAF118-005 **02** **NR1 S..4** **E06**
level max integer measure
V

gate-source voltage limit **V_GSlim**
V_{GSlim}

The maximum limiting direct voltage (in V) between gate and source terminals of a field-effect transistor.

AAF119-005 **01** **M..3** **A51**
simple non-quantitative code

frequency application **frequency appl**

Code of the frequency application of a filter.

AP = all pass
BP = band pass
BS = band stop
HP = high pass
LP = low pass

AAF120-005 **02** **NR1..4** **E49**
level min integer measure
dB

comb depth **comb depth**
comb depth

The minimum comb depth (in dB) of a comb filter.

AAF121-005 **02** **NR1..4** **F13**
level max integer measure
dB

pass-band attenuation **pass band att**
pass band att

The maximum pass-band attenuation (in dB) of a band pass filter.

AAF122-005 **01** **NR1..4** **E01**
level nom integer measure
A

rated breaking capacity **I_br**
I_{br}

The nominal prospective current (in A) that a fuse-link is capable of breaking.

IEC 60269-1 (1998)

AAF123-005 **02** **NR3 S..3.3ES2** **E06**
level max real measure
V

voltage drop **U_drop**
U_{drop}

The maximum dc or ac rms voltage (in V) across a fuse-link at the rated current.

IEC 60127-1 (1988)

AAF124-005 **01** **M..8** **A51**
simple non-quantitative code

integrated component **integr comp**

Code of a component integrated with a connector.

COVER = cover
EARTH = earth contact
HANDLE = handle
HOUSE = house
LATCH = latch
SHIELD = shield

AAF125-005 **01** **M..8** **A57**
simple non-quantitative code

contact spring material **cont spring mat**

Code of the material of the spring of the contacts of a connector, relay or switch.

BeCu = beryllium copper
PCuSn = phosphor bronze

AAF126-005 **01** **M..8** **A59**
simple non-quantitative code

UL flammability **UL flammability**

UL code of the flammability of a connector.

94-5V = 94-5V
94HB = 94HB
94HBF = 94HBF
94HBF-1 = 94HBF-1
94HBF-2 = 94HBF-2
94V-0 = 94V-0
94V-1 = 94V-1
94V-2 = 94V-2
94VTM-0 = 94VTM-0
94VTM-1 = 94VTM-1
94VTM-2 = 94VTM-2

AAF127-005 **01** **M..3** **A59**
simple non-quantitative code

IEC flammability **IEC flammable**

IEC code of the flammability of a connector.

FH1 = FH1
FH2 = FH2
FH3 = FH3
FV0 = FV0
FV1 = FV1
FV2 = FV2

REMARKS:
FH = Flame Horizontal FV = Flame Vertical

AAF128-005 **01** **M..3** **A91**
simple non-quantitative code

package colour **package colour**
envelope colour

UL code of the colour of a connector body.

BG = beige
BK = black
BL = blue
BN = brown
BZ = bronze
GN = green
GY = grey
IV = ivory
NC = natural (no pigmentation)
OR = orange
PK = pink
RD = red
TN = tan
VT = violet
WT = white
YL = yellow

AAF129-005 **02** **NR3..3.3ES2** **E06**
level max real measure
V

release voltage (dc) **U_rel(dc)**
$U_{rel(dc)}$

The maximum dc voltage (in V) at which an energised relay releases.

IEC 61810-7 (1997)

AAF130-005 **02** **NR2..3.3** **E49**
level max real measure
VA

contact power (dc) **P_cont(dc)**
$P_{cont(dc)}$

The maximum switching apparent power (in VA) as a product of the actual dc contact voltage and the actual dc contact current applied in combination to a switch or relay at resistive load.

REMARKS:
The apparent power is less then the product of contact current and contact voltage.

AAF131-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of phases **N_ph**
N_{ph}

The number of actual phases of a motor.

AAF132-005 **01** **NR3..3.3ES2** **T03**
level max real measure
m

travel **S_mot**
S_{mot}

The maximum travel (in m) of a linear motor.

AAF133-005 **01** **NR3..3.3ES2** **K12**
level nom real measure
N

rated force **F_nom**
F_{nom}

The nominal force (in N) of a linear motor.

AAF134-005 **01** **M..8** **A51**
simple non-quantitative code

integrated function **integr function**

Code of a component integrated with a switch.

BAR = barrier
KNOB = knob
LAMP = lamp
LED = light emitting diode
OO = on/off indication
PLATE = insulating plate
RING = blocking ring

AAF135-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

off-state current **I_D**
I_D

The maximum dc off-state current (in A) in the forward direction of a thyristor or triac at a specified high off-state voltage and a temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature
AAE737-005 = off-state voltage

REMARKS:
This off-state voltage will be equal to $V_{D\text{-}max}$, V_{DWM}, or V_{RDM} (worst-case situation).

AAF136-005 **01** **NR3 S..3.3ES2** **E01**
level minTypMax real measure
A

holding current **I_H**
I_H

The value as specified by level (minTypMax) of the dc forward current (in A) required to hold the thyristor or triac in the on-state at specified temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature

AAF137-005 **01** **NR3 S..3.3ES2** **E01**
level minTypMax real measure
A

latching current **I_L**
I_L

The value as specified by level (minTypMax) of the dc forward current (in A) required to maintain the thyristor or triac in the on-state after the triggering pulse has been removed, at a specified temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature

AAF138-005 **02** **NR3..3.3ES2** **E01**
level minTypMax real measure
A

collector current light **I_CEO(L)**
$I_{CEO(L)}$

The value as specified by level (minTypMax) of the direct collector current (in A) in a photosensor transistor at open base and specified collector-emitter voltage, irradiance of a certain wavelength and temperature of a temperature type.

AAE412-005 = collector-emitter voltage
AAE569-005 = wavelength at peak value
AAE570-005 = irradiance
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
Called light collector current when irradiance occurs.

AAF139-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

collector cut-off current dark I_CEO(D)
$I_{CEO(D)}$

The value as specified by level (minTypMax) of the direct collector current (in A) in a photosensor transistor at open base and zero irradiance and specified values of collector-emitter voltage and temperature of a temperature type.

AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
Called dark collector current if irradiance is zero.

AAF140-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

collector current light I_CEO(L)
$I_{CEO(L)}$

The value as specified by level (minTypMax) of the direct collector current (in A) in a photocoupler at open base and specified collector-emitter voltage, forward voltage, forward current and temperature of a temperature type.

AAE274-005 = forward current
AAE412-005 = collector-emitter voltage
AAE499-005 = forward voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAF141-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

cut-off current dark I_CEO I_CEO(D)
$I_{CEO(D)}$

The value as specified by level (minTypMax) of the direct collector current (in A) in a photocoupler at open base and zero forward current and specified collector-emitter voltage and temperature of a temperature type.

AAE412-005 = collector-emitter voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAF142-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

cut-off current dark I_CBO I_CBO(D)
$I_{CBO(D)}$

The value as specified by level (minTypMax) of the direct collector current (in A) in a photocoupler at open emitter and zero forward current and specified values of collector-base voltage and temperature of a temperature type.

AAE419-005 = collector-base voltage
AAE683-005 = temperature type
AAE685-005 = temperature

AAF143-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

reverse current light I_R(L)
$I_{R(L)}$

The value as specified by level (minTypMax) of the reverse direct current (in A) in a photosensor diode at specified values of reverse voltage, irradiance of a specified wavelength and temperature of a temperature type.

AAE335-005 = reverse voltage
AAE569-005 = wavelength at peak value
AAE570-005 = irradiance
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
Called light reverse current when irradiance occurs.

AAF144-005 02 NR3..3.3ES2 E01
level minTypMax real measure
A

reverse current dark I_R(D)
$I_{R(D)}$

The value as specified by level (minTypMax) of the reverse direct current (in A) in a photosensor diode at zero irradiance and specified values of reverse voltage and temperature of a temperature type.

AAE335-005 = reverse voltage
AAE683-005 = temperature type
AAE685-005 = temperature

REMARKS:
Called dark reverse current when irradiance is zero.

AAF145-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

digit length **l_dig**
l_{dig}

The nominal length (in m) of a digit of a liquid crystal display.

REMARKS:
The length is measured in the horizontal direction.

AAF146-005 **02** **X..3** **A56**
simple non-quantitative code

frequency application **frequency appl**

Code of the frequency identifying an amplifier, signal cable or transistor.

LF = low frequency
RF = radio frequency
WB = wideband

REMARKS:
Wideband only to be used for amplifiers.

AAF148-005 **02** **M..8** **A56**
simple non-quantitative code

socket type **socket type**

Code of the type of a connector socket.

EDGE = printed board socket
SBAT = battery socket
SFUS = fuse socket
SIC = IC socket
SLAM = lamp socket
SLCD = display socket
SOPT = LED socket
SREL = relay socket
STRA = transistor socket
STUB = tube socket

AAF150-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of contacts per row **N_cont/row**
N_{cont}/row

The number of contacts per row of a connector.

AAF151-005 **01** **M..3** **A56**
simple non-quantitative code

adjustability type **adjustability**

Code of the type of mechanical adjustability identifying an inductor.

FIX = fixed
VAR = variable

AAF152-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

input offset current **I_IO**
I_{IO}

The maximum value of the dc current (in A) equal to the difference in the currents in the two input terminals of an operational amplifier to attain zero output voltage at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF153-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A/Cel

temp coef input offset current **$a_IIO**
α_{IIO}

The maximum value of the quotient (in A/Cel) of the change of input offset current of an operational amplifier over the operating temperature range and at the nominal supply voltage.

IEC 60748-3 (1986)

AAF154-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

average bias current **I_IB**
input bias current I_{IB}

The maximum value of the dc current (in A), equal to the arithmetic average of the currents into the differential input terminals of an operational amplifier in a quiescent state at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF155-005 01 NR3 S..3.3ES2 E06
level max real measure
V

input offset voltage V_IO
V_{IO}

The maximum value of the dc voltage (in V), required to be applied between the input terminals of an operational amplifier, to cause zero output voltage at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF156-005 01 NR3 S..3.3ES2 E06
level max real measure
V/Cel

temp coef input offset voltage $a_VIO
α_{VIO}

The maximum value of the quotient (in V/Cel), of the change of input offset voltage of an operational amplifier over the operating temperature range and at the nominal supply voltage.

IEC 60748-3 (1986)

AAF157-005 02 NR2 S..3.3 E06
level max real measure
V

common-mode input voltage V_IC
common-mode input voltage range V_{IC}

The maximum common-mode input voltage (in V) applied to a differential amplifier which, if exceeded, may cause the amplifier to cease to function within specification.

IEC 60748-3 (1986)

AAF158-005 01 NR2 S..3.3 E06
level min real measure
V

output voltage peak-to-peak V_OPP
output voltage swing V_{OPP}

The minimum value of the peak-to-peak output voltage (in V) of a voltage amplifier over the operating temperature range, at specified load resistance and supply voltage.

AAE102-005 = supply voltage
AAE212-005 = load resistance

IEC 60748-3 (1986)

AAF159-005 02 NR3..3.3ES2 E06
level min real measure
1

large-signal voltage gain A_VOL
A_{VOL}

The minimum guaranteed ratio of the maximum output voltage swing to the change in input voltage, of a voltage amplifier at specified supply voltage and load resistance.

AAE102-005 = supply voltage
AAE212-005 = load resistance

AAF160-005 01 NR1..4 E06
level minTypMax integer measure
dB

common-mode rejection ratio k_CMR
k_{CMR}
CMRR

The value as specified by level (minTypMax) of the ratio of the differential-mode voltage amplification to the common-mode voltage amplification (in dB) of a differential amplifier over the operating temperature range at specified supply voltage.

AAE102-005 = supply voltage

IEC 60748-3 (1986)

AAF161-005 01 NR3..3.3ES2 E06
level max real measure
V/V

supply voltage sensitivity k_SVS
k_{SVS}

The maximum absolute value of the ratio (in V/V) of the change in input offset voltage to the corresponding change in value of any one power-supply voltage, with all remaining power-supply voltages held constant, of an operational amplifier at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF162-005 **02** **NR1..4** **E06**
level min integer measure
V/s

slew rate **SR**
max change rate output voltage SR
S_{VOM}

The minimum guaranteed maximum rate of change of the output voltage (in V/s) of a voltage amplifier at specified load resistance, maximum output voltage swing and at reference conditions.

AAE212-005 = load resistance
AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF163-005 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω

differential input resistance **r_id**
r_{id}

The minimum resistance (in ohms) between the inputs of a differential amplifier at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

REMARKS:
In order to be able to consider the input impedance as a pure resistance, the measurement signal frequency must be sufficiently low so that there are no significant phase differences between the voltages at the input terminals of the amplifier to be measured with or without the series resistor.

AAF164-005 **01** **NR3 S..3.3ES2** **E33**
level min real measure
Ω

common-mode input resistance **r_ic**
r_{ic}

The minimum resistance (in ohms) between the inputs in parallel and the electrical reference point of a differential amplifier at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF165-005 **01** **NR3 S..3.3ES2** **E33**
level typ real measure
Ω

output resistance **r_out**
r_{out}

The typical resistance (in ohms) at the output of a voltage amplifier at reference conditions.

AAE995-005 = reference conditions

REMARKS:
This is the resistance looking into the output terminal with the output at null.
This parameter is defined only under small-signal conditions at frequencies above a few hundred cycles to eliminate the influence of drift and thermal feedback.

AAF166-005 **01** **NR3..3.3ES2** **F03**
level min real measure
Hz

unity-gain frequency **f_1**
small-signal unity gain f_1

The minimum value of the frequency (in Hz) at which the modulus of the voltage open-loop amplification of a voltage amplifier is equal to unity at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

REMARKS:
For amplifiers having 6 dB-per-octave rolloff, the frequency is also called unity gain bandwidth.

AAF167-005 **02** **NR3..3.3ES2** **F03**
level min real measure
Hz

gain bandwidth product **GB**
gain bandwidth GB

The minimum value of the small-signal gain bandwidth product (in Hz) of a voltage amplifier at specified frequency and at reference conditions.

AAE029-005 = frequency
AAE995-005 = reference conditions

REMARKS:
For amplifiers having a 6 dB-per-octave rolloff, the gain-bandwidth product is constant within this area.

AAF168-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

total response time **t_tot**
settling time t_{tot}

The maximum value of the sum of delay time, slope time and ripple time (in s) of a voltage amplifier under small-signal conditions and compensated for unity gain at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

REMARKS:
The ripple time is the time interval between the end of the slope time and that instance at which the magnitude of the output signal reaches, for the last time, a specified level range containing the final output signal level. This level range is called ripple tolerance, and generally is 0,1 % of the final output signal.

AAF169-005 **01** **X..3** **A56**
simple non-quantitative code

amplified quantity **amplified qnty**

Code of the quantity which is amplified, identifying a low-frequency amplifier.

PWA = power amplifier
VTA = voltage amplifier

AAF170-005 **01** **NR1..4** **E06**
level min integer measure
dB

power supply rejection ratio **PSRR**
supply voltage rejection ratio PSRR
k_{SVR}

The minimum absolute value of the ratio (in dB) of the change in any one power-supply voltage to the resulting change in input offset voltage, with all remaining power-supply voltages held constant, of an operational amplifier at reference conditions.

AAE995-005 = reference conditions

IEC 60748-3 (1986)

AAF191-005 **01** **X..3** **A56**
simple non-quantitative code

input configuration **input config**

Code of the type of input configuration, identifying a voltage amplifier.

DFA = differential amplifier
SSA = single-sided amplifier

AAF192-005 **01** **X..3** **A56**
simple non-quantitative code

coupling method **coupling**

Code of the coupling method identifying a differential amplifier.

ACA = ac-coupled amplifier
OPA = operational amplifier (dc-coupled)

AAF193-005 **02** **NR1..4** **G21**
level min integer measure
dB

sensitivity **sensitivity**
output sound pressure level sensitivity

The minimum sound pressure level of a loudspeaker (in dB), relative to the reference sound pressure level at any frequency within the effective frequency range referred to a sinusoidal input power of 1 W and to a distance of 1 m on the reference axis.

AAF202-005 **01** **X..3** **A91**
simple non-quantitative code

chromaticity **chromaticity**

Code of the chromaticity type of a display tube.

COL = colour display tube
MCR = monochrome display tube

AAF203-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

anode current average **I_a(av)**
$I_{a(av)}$

The maximum limiting long term average anode current (in A) of a display tube.

IEC 60050 (531) (1974)

REMARKS:
'long term' means that the image is stationary for an indefinite period of time, as during the display of test pictures, computer images, teletext data or stationary television scenes lasting longer than 30 s.

AAF204-005 **01** **NR3..3.3ES2** **E01**
level max real measure
A

anode current peak **I_a(peak)**
$I_{a(peak)}$

The maximum limiting long term peak anode current (in A) of a display tube.

IEC 60050 (531) (1974)

REMARKS:
'long term' means that the image is stationary for an indefinite period of time, as during the display of test pictures, computer images, teletext data or stationary television scenes lasting longer than 30 s.

AAF205-005 **02** **NR1..4** **Q56**
level nom integer measure
1

vertical resolution **resolution V**
resolution V

The number of visible horizontal lines of a display tube.

IEC 60050 (531) (1974)

REMARKS:
Measured with the shrinking raster method at screen centre.

AAF206-005 **01** **NR2 S..3.3** **E06**
level miNoMax real measure
V

grid 2 voltage **V_g2**
V_{g2}

The value as specified by level (miNoMax) of the direct voltage (in V), on grid 2 of a monochrome display tube.

REMARKS:
All voltages relative to grid 1 (cathode drive) to the cathode (grid drive).

AAF207-005 **02** **NR3 S..3.3ES2** **E01**
level minMax real measure
A

output short-circuit current **I_OS**
dynamic output current I_{OS}

The value as specified by the level (minMax) of the output current (in A) of a digital TTL IC, when an output is short-circuited, at maximum supply voltage, and in a temperature range between specified temperatures (T_1 and T_2).

NOTES
1 Not more than one output should be shorted at a time.
2 The duration of the short-circuit should not exceed 1s.

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
The output short-circuit current was intended originally to reassure the TTL user that the device would withstand accidental grounding e.g. during in-circuit testing.
This parameter has become a measure of the ability of the circuit to charge the line capacitance and is used to calculate propagation delays.
In CMOS devices there is no need to specify this parameter because the purely capacitive loads allow extrapolation of the ac parameters to calculate the increase in propagation delay.

AAF208-005 **01** **NR2 S..3.3** **E06**
level min real measure
V

positive-going threshold **V_IT+**
V_{IT+}
V_{ITP}

The minimum input voltage level (in V) of a combinatorial, sequential or interface function of an IC that, when crossed with a rising input voltage, enables an output to change its logic state in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF209-005 **01** **NR2 S..3.3** **E06**
level max real measure
V

negative-going threshold **V_IT-**
V_{IT-}
V_{ITN}

The maximum input voltage level (in V) of a combinatorial, sequential or interface function of an IC that, when crossed with a falling input voltage, enables an output to change its logic state in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF210-005 **01** **NR3..3.3ES2** **E06**
level min real measure
V

hysteresis **V_hys**
V_{hys}

The minimum difference (in V) between the positive-going and negative-going threshold voltages of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF211-005 **01** **NR3..3.3ES2** **F03**
level max real measure
Hz

maximum clock frequency **f_clk(max)**
$f_{clk(max)}$

The maximum clock frequency (in Hz) at 50 % duty cycle, which may be applied to a combinatorial, sequential or interface function or a register function of an IC, in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF212-005 **02** **NR3 S..3.3ES2** **T07**
level min real measure
s

set-up time **t_su**
t_{su}

The minimum time interval (in s) between application of a signal that is maintained at an input terminal and a subsequent active transition of the corresponding timing pulse of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

NOTES
1 The set-up time is the actual time between two signals and may be insufficient to accomplish the intended result. A minimum value is specified that is the shortest interval for which correct operation of the digital circuit is guaranteed.
2 The set-up time may have a negative value, in which case the minimum limit defines the longest interval (between the active transition and the application of the other signal) for which interval correct operation of the digital circuit is guaranteed.

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF213-005 **02** level min **NR3 S..3.3ES2** real measure s **T07**

hold time **t_h** t_h

The minimum time interval (in s) during which a signal is retained at an input terminal after the subsequent active transition of the corresponding timing signal of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

NOTES
1 The hold time is the actual time between two signals and may be insufficient to accomplish the intended result. A minimum value is specified that is the shortest interval for which correct operation of the digital circuit is guaranteed.
2 The hold time may have a negative value, in which case the minimum limit defines the longest interval (between the active transition and the application of the other signal) for which interval correct operation of the digital circuit is guaranteed.

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF214-005 **02** level min **NR3..3.3ES2** real measure s **T07**

output enable time **t_lz** t_{lz} t_{oe}

The minimum time interval (in s) between application of a signal that is maintained at an input terminal and causes an output terminal to change from a high impedance (off) state to either of the defined active levels (HIGH or LOW) of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF215-005 **02** level max **NR3..3.3ES2** real measure s **T07**

output disable time **t_hz** t_{hz} t_{od}

The maximum time interval (in s) between application of a signal that is maintained at an input terminal and causes an output terminal to change from either of the defined active levels (HIGH or LOW) to a high impedance (off) state, of a combinatorial, sequential or interface function of an IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF216-005 **02** level min **NR3..3.3ES2** real measure s **T07**

pulse width HIGH **t_WH**
pulse duration HIGH t_{WH}

The minimum pulse width (in s) at the minimum HIGH-level required for correct operation, applied to a combinatorial, sequential or interface function of an IC, in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF217-005 **02** level min **NR3..3.3ES2** real measure s **T07**

pulse width LOW **t_WL**
pulse duration LOW t_{WL}

The minimum pulse width (in s) at the minimum LOW-level required for correct operation, applied to a combinatorial, sequential or interface function of an IC, in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF218-005 **02** **NR3..3.3ES2** **T07**
level nom real measure
s

metastable window **t_meta**
t_{meta}

The nominal time interval (in s) in which an inappropriate excitation gives rise to a metastable pattern at the output of a combinatorial, sequential or interface function of an IC, in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF219-005 **02** **NR3..3.3ES2** **T07**
level min real measure
s

recovery time **t_rec**
removal time t_{rec}

The minimum time interval (in s) between the trailing edge of an asynchronous control input pulse and the reference point on the activating edge of a synchronous (clock) input pulse so that the combinatorial, sequential or interface function of an IC will respond to the synchronous input in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF221-005 **01** **M..3** **A56**
simple non-quantitative code

bus structure **bus structure**

Code identifying the bus structure of a microprocessor.

MUL = multiple bus structure (Harvard)
SIN = single bus structure (von Neumann)

AAF222-005 **01** **M..8** **A56**
simple non-quantitative code

instruction set architecture **instr set arch**

Code identifying the instruction set architecture of a microprocessor.

CISC = complex instruction set computer
RISC = reduced instruction set computer

AAF223-005 **02** **NR1..4** **F01**
level nom integer measure
1

machine cycle **M**
number of clock periods M

The number of internal clock periods in which a microcontroller or microprocessor carries out a memory read or write operation.

AAF224-005 **01** **NR3..3.3ES2** **F03**
level minMax real measure
Hz

clock frequency **f_clk**
f_{clk}

The value as specified by the level (minMax) of the clock frequency (in Hz) which may be applied to a microcontroller or microprocessor in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF225-005 **01** **NR3..3.3ES2** **F03**
level minMax real measure
Hz

internal clock frequency **f_clk(int)**
$f_{clk(int)}$

The value as specified by the level (minMax) of the internal clock frequency (in Hz) of a microcontroller or microprocessor in a temperature range between specified temperatures T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF226-005 **01** **NR1..4** **J01**
level nom integer measure
bit

address bus width **addr bus width**
addr bus width

The width of the address bus (in bit) of a microcontroller or microprocessor.

AAF227-005 **01** **NR1..4** **J01**
level nom integer measure
bit

data bus width **data bus width**
data bus width

The width of the data bus (in bit) of a microcontroller or microprocessor.

AAF228-005 **02** **NR3..3.3ES2** **J01**
level nom real measure
1

addressable storage size **N_word**
N_{word}

The number of words of the storage capacity of the program memory that a microprocessor or microcontroller can access via its corresponding external address bus.

REMARKS:
The addressable storage size equals 2^n, in which n equals the address bus width (in bit).

AAF229-005 **02** **NR3..3.3ES2** **J05**
level nom real measure
i/s

instruction rate **Mips**
Mips

The instruction handling speed (in i/s) at specified externally applied maximum clock frequency, of a microcontroller or microprocessor.

NOTE
The instruction handling speed is determined by the kind of test program used.

ISO/IEC2382-1 (1993)

AAF230-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of internal registers **N_reg**
N_{reg}

The number of internal registers of a microcontroller or microprocessor.

AAF231-005 **02** **M..8** **A56**
simple non-quantitative code

PLD programmability **programmability**

Code identifying the programmability of a PLD.

EEPLD = *electrically erasable PLD
EPLD = erasable PLD
LDPLD = loadable PLD
MPLD = mask programmed PLD
OTPLD = one time programmable PLD
UVPLD = *UV erasable PLD

AAF232-005 **02** **NR3..3.3ES2** **T07**
level min real measure
s

output data-valid time **t_data**
t_{data}

The minimum time interval (in s) during which output data continues to be valid following a change of input conditions that could cause the output data to change at the end of the interval applicable to a storage IC in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60748-2 (1997)

AAF233-005 **01** **X..3** **A56**
simple non-quantitative code

RAM type **RAM type**

Code identifying a RAM function of an IC.

DRM = DRAM
SRM = SRAM

AAF234-005 **01** **M..8** **A56**
simple non-quantitative code

register type **register type**

Code identifying a register function of an IC.

FIFO = first-in first-out register
LIFO = last-in first-out register
SHR = shift register

AAF235-005 **01** **M..8** **A55**
simple non-quantitative code

virginity state **virginity state**
unprogrammed state

Code identifying the logic state of the outputs of a virgin (unprogrammed) or erased EPROM.

HIGH = HIGH-state
LOW = LOW-state

AAF236-005 **02** **M..8** **A56**
simple non-quantitative code

ROM programmability **ROM prog**

Code identifying the programmability of a ROM.

EEPROM = *electrically erasable ROM
EPROM = erasable ROM
MROM = mask programmed ROM
OTPROM = one time programmable ROM
UVPROM = *UV erasable ROM

AAF237-005 **01** **NR2..3.3** **E01**
level max real measure
A

programming current **I_PP**
I_{PP}

The maximum value of the current (in A) sinked by the programming input of an EPROM during programming at the reference temperature.

AAF238-005 **01** **NR2..3.3** **E06**
level minMax real measure
V

programming voltage **V_PP**
V_{PP}

The value as specified by level (minMax) of the programming voltage (in V) of an EPROM at the reference temperature.

AAF239-005 **01** **X..3** **A58**
simple non-quantitative code

bare/insulated **bare/insulated**

Code indicating whether a conductor consists of a single bare conductor or contains one or more insulated conductive parts.

BAR = bare conductor
INS = insulated conductor (wires and cables)

AAF240-005 **01** **M..8** **A57**
simple non-quantitative code

conductor finish **conductor finsh**

Code of the finish material of a conductive part of a conductor.

Ag = silver
Ni = nickel
Sn = tin

AAF241-005 **01** **M..8** **A57**
simple non-quantitative code

conductive material **conductor mat**

Code of the material of a conductive part of a conductor.

Al = aluminium
Cu = copper
CuCd = copper-cadmium
CuCdCr = copper-cadmium-chromium
CuCr = copper-chromium
CuNi = copper-nickel
CuSn = bronze
CuZn = brass
Fe/Cu = iron core/copper mantle

AAF242-006 **01** **M..8** **A58**
simple non-quantitative code

conductor shape **conductor shape**

Code of the shape of a conductive part of a conductor.

OVAL = oval
RECTAN = rectangular
ROUND = round
SECTOR = sector

AAF243-005 **03** **M..8** **A58**
simple non-quantitative code

conductor configurationconductor confg

Code of the configuration of a conductive part of a conductor.

BRAID = *braided conductor
BUNCH = *bunched conductor
LITZ = *litze conductor
SOLID = solid conductor
STRAND = stranded conductor
TINSEL = *tinsel conductor

AAF244-005 **01** **M..8** **A58**
simple string

conductor size AWG **AWG code**

AWG code of the size of a conductive part of a conductor.

REMARKS:
For values see standard nominal diameters and cross-sectional areas of solid round wires.

AAF245-005 **02** **NR3..3.3ES2** **E33**
level nom real measure
Ω/m

dc resistance **R_dc**
R_{dc}
R_0

The nominal dc resistance per unit length (in Ω/m) of a conductive part of a conductor.

AAF246-005 **02** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

conductor diameter **d_cond**
d_{cond}

The value as specified by level (miNoMax) of the diameter (in m) of a conductive part of a round conductor.

AAF247-005 **03** **NR3..3.3ES2** **T05**
level nom real measure
m^2

cross-section **A_cross**
A_{cross}

The nominal cross-sectional area (in m^2) of a conductive part of a conductor.

AAF248-005 **02** **M..8** **A52**
simple non-quantitative code

insulating material **insulating mat**

ISO code of the material of the insulating layer of an insulated conductor.

E/TFE = *ethylene/tetrafluoroethylene
ECTFE = *ethyl cellulose tetrafluoroethylene
ENAM = enamel
FEP = *fluoroepoxy
PA = *polyamide
PAPER = paper
PE = *polyethylene
PFA = *perfluoro alkoxyl alkane
POLY = polymer
PP = *polypropylene
PTFE = *polytetrafluoroethylene
PUR = *polyurethane
PVC = *polyvinylchloride
RUBBER = rubber
TEXTILE = textile
UP = *unsaturated polyester

REMARKS:
Only the polymers are coded according to ISO.

AAF249-005 **01** **X..3** **A55**
simple non-quantitative code

cable/wire **cable/wire**

Code indicating the multiplicity of conductors of an insulated conductor.

CBL = cable (multi-conductor)
IWR = insulated wire (single conductor)

AAF250-005 **02** **M..3** **A91**
simple non-quantitative code

colour code **colour code**

IEC code of the colour of the insulation layer of an insulated wire.

0 = black
1 = brown
2 = red
22 = pink
3 = orange
4 = yellow
5 = green
55 = turquoise
6 = blue
7 = violet
8 = grey
9 = white

AAF251-005 **03** **NR1 S..4** **E06**
level min integer measure
V

test voltage minimum **U_bd(min)**
minimum breakdown voltage $U_{bd(min)}$
dielectric strength

The minimum value of the dc voltage (in V) which the insulation of an insulated conductor can withstand.

IEC 60851-5 (1996)

AAF252-005 **01** **M..8** **A58**
simple string

MIL cable type **MIL code**

MIL code of the type of a cable.

REMARKS:
For values see naming document.

AAF253-005 **01** **M..3** **A58**
simple non-quantitative code

LF cable element **LFcable element**

Code indicating the type of basic elements which an LF cable contains.

1 = singles
1S = singles screened
2 = pairs
2S = pairs screened
3 = triples
3S = triples screened
4 = quads
4S = quads screened
5 = quintuples
5S = quintuples screened

AAF254-005 **01** **M..3** **A58**
simple non-quantitative code

cable configuration **CBL config**

Code of the configuration of a cable.

BND = bundled cable
FLT = flat cable

AAF255-005 **02** **NR1..4** **Q51**
level nom integer measure
1

number of cable elements **N_elem**
N_{elem}

The number of basic elements in a cable.

REMARKS:
The type of basic element is defined by AAF253-005 and AAF256-005.

AAF256-005 **01** **M..3** **A58**
simple non-quantitative code

RF cable element **RFcable element**

Code indicating the type of basic elements of an RF cable.

CX = coaxial cable (concentric)
PP = parallel pairs
PPS = parallel pairs screened

AAF257-005 **03** **M..8** **A58**
simple non-quantitative code

dielectric construction **diel config**

Code of the construction of the dielectric of an RF cable.

AIR = air-spaced dielectric
FOAM = *foam
SEMAIR = semi-air-spaced dielectric
SOLID = solid dielectric
THREAD = *thread
TUBE = *tube/thread

AAF258-005 **01** **NR1..4** **E06**
level nom integer measure
V

working voltage **U**
U

The nominal ac rms voltage (in V) between any two conductors, for which a cable is designed.

IEC 60183 (1984)

AAF259-005 **01** **NR3..3.3ES2** **E09**
level nom real measure
F/m

capacitance between conductors **C_c-c**
$C_{c\text{-}c}$

The nominal capacitance per unit length (in F/m) between a pair of conductors of a cable.

AAF260-005 **02** **NR3..3.3ES2** **E44**
level miNoMax real measure
Ω

characteristic impedance **|Z|**
|Z|

The value as specified by level (miNoMax) of the modulus of the characteristic impedance (in ohms) of a pair of conductors of a cable or of a radio-frequency connector at specified frequency.

AAE029-005 = frequency

AAF261-005 **02** **NR1..4** **F10**
level nom integer measure
dB/m

attenuation **attenuation**
attenuation

The nominal power attenuation (in dB/m) of a pair of conductors of a cable at specified frequency.

AAE029-005 = frequency

IEC 60096-1 (1986)

AAF262-005 **01** **M..3** **A56**
simple non-quantitative code

wire application **application**

The code of the application of an insulated wire.

CNT = connecting wire
WND = winding wire

AAF264-005 **01** **M..8** **A56**
simple non-quantitative code

driving method **@MUX-ratio**
drive method @MUX-ratio

Code of the driving method (ratio) as applied to a liquid crystal display or module, as a variable.

01:08 = 01:08
0.086111111 = 0.086111111
0.111111111 = 0.111111111
0.180555556 = 0.180555556
0.208333333 = 0.208333333
01:01 = DD direct drive
01:02 = 01:02
01:03 = 01:03
01:16 = 01:16
01:32 = 01:32
01:04 = 01:04

AAF265-005 **01** **M..3** **A53**
simple non-quantitative code

packing arrangement **packing arrange**

Code of the arrangement of products in the first level packing.

ARR = arranged
CON = *concertina
LSE = loose
MET = metal strip
TAP = taped
WND = *wound

AAF266-005 **02** **M..8** **A53**
simple non-quantitative code

inductance level **ind level**

Code of the inductance level of a fixed resistor.

LI = low inductance
NI = normal inductance

AAF267-005 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

inner tape spacing **b_tape**
b_{tape}

The nominal distance (in m) between the inside of the two tapes used for taped products with axial leads.

IEC 60286-1 (1997)

AAF268-005 **01** **M..3** **A53**
simple non-quantitative code

orientation **orientation**

Code of the longitudinal orientation of taped products.

F = forward
R = reverse

REMARKS:
The orientation applies to:
a) the anode of polarised components.
b) the collector/drain of transistors.
c) terminal number one of components with more than three terminals

AAF269-005 **02** **M..3** **A53**
simple non-quantitative code

marking method **marking method**

Code of the marking method on the packing of products.

BAR = bar coded
CHA = character coded
COL = colour coded

AAF270-005 **01** **M..3** **A53**
simple string

packing level **@packing level**

Code of the packing level for products.

NOTE
The first level of packing is that enclosing one or more products. Subsequent higher levels of packing enclose one, or more, of the immediately lower level of packing.

REMARKS:
This data element must be used in combination with AAE111 (packing type) Values can be:
1 = first level
2 = second level
3 = third level etc.

AAF271-005 **01** **M..8** **A58**
simple non-quantitative code

screen shape **screen shape**

Name indicating the shape of the screen of a TV picture or monitor tube.

CONVEX = conventional
FLAT = flat (face-plate radius > 1000 mm)
FLATSQR = flat square (as flat but with corner radius 10mm)

AAF272-005 **01** **NR1..4** **T03**
level nom integer measure
inch

tube size (inch) **d_gls(i)**
$d_{gls(i)}$

The nominal overall outer diagonal (in inch) of the glass envelope of a display tube, used as product identification.

AAF273-005 **02** **M..8** **A58**
simple non-quantitative code

display format **display format**

Name of the display format for which the deflection unit of a monitor display tube is designed.

landscape = landscape (horizontal)
portrait = portrait (vertical)

AAF274-005 **01** **NR3..3.3ES2** **F03**
level max real measure
Hz

line frequency **f_line**
f_{line}

The maximum line frequency (in Hz) which may be applied to a deflection unit for monitor tubes, at specified ambient temperature.

AAE014-005 = ambient temperature

REMARKS:
The line frequency is limited by the maximum operating copper temperature of the deflection coils.

AAF275-002 **01** **NR1..4** **H02**
level nom integer measure
Cel

junction stress temperature **T_stress(junc)**
virtual junction stress temperature $T_{stress(junc)}$

The nominal junction temperature (in Cel) of a transistor, diode, trigger device, optoelectronic device or integrated circuit during stress.

AAF276-002 **01** **NR1 S..4** **H02**
level min integer measure
Cel

stress temperature min **T_stress(min)**
$T_{stress(min)}$

The minimum temperature (in Cel) applied to a component during cycle stress.

REMARKS:
See AAF277-002 for the maximum stress temperature.

AAF277-002 **01** **NR1 S..4** **H02**
level max integer measure
Cel

stress temperature max **T_stress(max)**
$T_{stress(max)}$

The maximum temperature (in Cel) applied to a component during cycle stress.

REMARKS:
See AAF276-002 for the minimum stress temperature.

AAF278-002 **03** **NR1 S..4** **H02**
level nom integer measure
Cel

stress ambient temperature **T_stesss(amb)**
stress ambient free air temperature $T_{stress(amb)}$

The nominal ambient free air temperature (in Cel) applied to a component during high temperature life test.

AAF279-002 **01** **NR1..4** **K02**
level nom integer measure
%

stress relative humidity **RH_stress**
RH_{stress}

The nominal value of the ambient humidity (in %) relative to saturation humidity, applied to a component during humidity resistance stress.

REMARKS:
Relative humidity: Actual humidity by volume, divided by humidity by volume at saturation, at the same temp.
Humidity by volume: Mass of water vapour divided by the volume of the gaseous mixture.

AAF281-005 **01** **NR1..4** **E06**
level max integer measure
V

limiting element voltage (ac) **U_max(ac)**
limiting voltage (ac) $U_{max(ac)}$

The maximum limiting ac voltage (in V) that may be applied to a resistor.

AAF282-005 **03** **NR1..4** **H01**
level nom integer measure
%

thermal sensitivity tolerance **B_25/85(tol)**
B_25/85 tolerance $B_{25}/85(tol)$

The nominal tolerance on the thermal sensitivity index (in %) identifying a NTC thermistor.

IEC 60539-1 (2002)

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAF283-005 **02** **NR3..3.3ES2** **T05**
level nom real measure
m^2

minimum cross-sectional area **A_min**
A_{min}

The nominal value of the minimum cross-sectional area (in m^2) of a soft magnetic part.

AAF284-005 **01** **NR1..4** **E17**
simple integer measure
A/m

magnetic field strength **@H**
@H

The magnetic field strength (in A/m) applied to a magnetic part or magnetic material as a variable.

AAF286-005 **01** **NR3..3.3ES2** **K02**
level nom real measure
kg/m^3

density **$r_d**
ρ_d

The nominal density (in kg/m^3) of a material.

AAF287-005 **01** **NR1..4** **E17**
level minTypMax integer measure
A/m

coercivity H_cB **H_cB**
H_{cB}

The value as specified by level (minTypMax) of the magnetic field strength (in A/m) applied to a hard magnetic material, necessary to bring the flux density from saturation to zero by a monotonically changing field.

IEC 60050 (221) (1990)

AAF288-005 **01** **NR1..4** **E17**
level minTypMax integer measure
A/m

coercivity H_cJ **H_cJ**
H_{cJ}

The value as specified by the level (minTypMax) of the magnetic field strength (in A/m) applied to a hard magnetic material, necessary to bring the polarisation from saturation to zero by a monotonically changing field.

IEC 60050 (221) (1990)

AAF289-005 **01** **NR3..3.3ES2** **E17**
level nom real measure
A/m

field strength at (BH)_max **H_d**
H_d

The nominal value of the magnetic field strength (in A/m) at which the BH product of a hard magnetic material is maximum.

AAF290-005 **01** **NR3..3.3ES2** **E17**
level min real measure
A/m

saturation field strength **H_s**
H_s

The minimum value of the magnetic field strength (in A/m) at saturation magnetisation of a hard magnetic material.

AAF291-005 **01** **NR3 S..3.3ES2** **H03**
level typ real measure
(A/m)/K

temperature coefficient H_cJ **$a_HcJ**
α_{HcJ}

The typical value of the mean temperature coefficient of the polarisation coercivity (in (A/m)/K) of a hard magnetic material over a temperature range, between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

$$\alpha_{HcJ} = \frac{H_{cJ}2 - H_{cJ}1}{(T_2 - T_1)}$$

where H_{cJ1} and H_{cJ2} are the coercivities at temperature T_1 and T_2 respectively.

AAF292-005 **01** **NR3..3.3ES2** **E19**
level minTypMax real measure
T

remanent flux density **B_r**
remanence B_r

The value as specified by level (minTypMax), of the flux density (in T) remaining in a magnetised hard magnetic material when, in the absence of a self-demagnetising field, the magnetic field strength is brought to zero.

IEC 60050 (221) (1990)

AAF293-005 **01** **NR3..3.3ES2** **E19**
level nom real measure
T

flux density at (BH)_max **B_d**
B_d

The nominal value of the magnetic flux density (in T) at which the BH product of a hard magnetic material is maximum.

AAF294-005 **02** **NR1..4** **E25**
level nom integer measure
1

recoil permeability **$m_rec**
μ_{rec}

The nominal value of the permeability corresponding to the slope of the recoil line of a hard magnetic material.

NOTE
The recoil line is a straight line approximating the sub-hysteresis loop which is traversed when the magnet is saturated and then subjected to demagnetising fields less than the coercivity.

IEC 60050 (221) (1990)

AAF295-005 **01** **NR3..3.3ES2** **E30**
level minTypMax real measure
J/m^3

BH product max **BH_max**
BH_{max}

The value as specified by level (minTypMax), of the maximum product of the magnetic flux density and magnetic field strength (in J/m^3) attained on the demagnetisation curve of a hard magnetic material.

NOTE
The BH product is equal to twice the total energy stored in the external field of the magnet per unit volume of the magnet.

IEC 60050 (221) (1990)

AAF296-005 **01** **NR3..3.3ES2** **E30**
level minTypMax real measure
J/m^3

B_r x H_cJ product **B_rxH_cJ**
$B_r \times H_{cJ}$

The value as specified by the level (minTypMax), of the product of remanent flux density B_r and coercivity H_{cJ} (in J/m^3) of a hard magnetic material

AAF297-005 **01** **NR3 S..3.3ES2** **H03**
level typ real measure
%/K

temperature coefficient Br **$a_Br**
α_{Br}

The typical value of the mean temperature coefficient of the remanence relative to the remanence at the reference temperature (in %/K) of a hard magnetic material over a temperature range, between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

$$\alpha_{Br} = \frac{B_r 1 - B_r 2}{B_{rref}(T_2 - T_1)}$$

where B_{r1} and B_{r2} are the remanences at temperatures T_1 and T_2 respectively.

AAF298-005 **02** **NR3..3.3ES2** **E25**
level max real measure
1

loss factor **tan$d/$m_r**
$\tan\delta/\mu_r$

The maximum value of the tangent of the magnetic loss angle divided by the relative permeability of a soft magnetic material at specified ambient temperature and frequency.

AAE014-005 = ambient temperature
AAE029-005 = frequency

$$\frac{\tan\delta}{\mu_r} = \frac{\mu''}{(\mu')^2}$$

IEC 60050 (221) (1990)

AAF299-005 **02** **NR3..3.3ES2** **E25**
level max real measure
1

disaccommodation factor **D_F**
D_F

The maximum fractional decrease of permeability of a soft magnetic material over a time interval between T_1 and T_2 after demagnetisation divided by the permeability at T_1 and by the logarithm of t_2/t_1.

AAE014-005 = ambient temperature
AAF312-005 = time t_1
AAF313-005 = time t_2

$$D_F = \frac{\mu_1 - \mu_2}{(\mu_1)^2 \lg\frac{t_2}{t_1}}$$

where μ_1 and μ_2 are the values of the relative permeability at the beginning and the end of the given interval respectively.

IEC 60050 (221) (1990)

AAF300-005 **01** **NR2..3.3** **H07**
level max real measure
W/m^3

specific total loss **P_V**
total loss volume density P_V

The maximum total power absorbed divided by the volume (in W/m^3) of a soft magnetic material at specified frequency, ambient temperature and peak flux density.

NOTE
The total loss may include: eddy current loss, hysteresis loss, rotational hysteresis loss, residual loss, gyromagnetic resonance loss.

AAE014-005 = ambient temperature
AAE029-005 = frequency
AAE768-005 = peak flux density

IEC 60050 (221) (1990)

AAF301-005 **02** **NR3..3.3ES2** **T07**
level max real measure
s

reverse recovery time (I) **t_rr(I)**
$t_{rr(I)}$

The maximum reverse recovery time (in s) of a diode, when switched from a specified forward current to a specified reverse current at specified junction temperature.

AAE271-005 = junction temperature
AAE274-005 = forward current
AAE994-005 = reverse current

IEC 60747-2 (2000)

AAF302-005 **01** **NR3 S..3.3ES2** **E06**
level min real measure
V

breakdown voltage **V_(BR)R**
$V_{(BR)R}$

The minimum breakdown voltage (in V) at which a diode will commence avalanche breakdown, at specified reverse current and temperature of a temperature type.

AAE683-005 = temperature type
AAE685-005 = temperature
AAE994-005 = reverse current

REMARKS:
Sometimes measured under pulsed conditions to avoid excessive dissipation.

AAF303-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

diode upper capacitance **C_d1**
C_{d1}

The value as specified by level (minTypMax) of the upper capacitance (in F) between the terminals of a variable capacitance diode at specified values of the lower reverse voltage, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE683-005 = temperature type
AAE685-005 = temperature
AAE961-005 = voltage V_1

REMARKS:
A variable capacitance diode varies its characteristic capacitance from a high value to a lower value when the applied reverse voltage increases from a low value to a higher value and vice versa.

AAF304-005 **01** **NR3..3.3ES2** **E09**
level minTypMax real measure
F

diode lower capacitance **C_d2**
C_{d2}

The value as specified by level (minTypMax) of the lower capacitance (in F) between the terminals of a variable capacitance diode at specified values of the upper reverse voltage, frequency and temperature of a temperature type.

AAE029-005 = frequency
AAE683-005 = temperature type
AAE685-005 = temperature
AAE962-005 = voltage V_2

REMARKS:
A variable capacitance diode varies its characteristic capacitance from a high value to a lower value when the applied reverse voltage increases from a low value to a higher value and vice versa.

AAF305-005 **01** **X..3** **A56**
simple non-quantitative code

category of diode device **diode device**

Code of the category to which a diode device belongs.

BRI = bridge rectifier
DIO = diode
VMP = voltage multiplier

AAF306-005 **01** **NR3..3.3ES2** **E25**
level max real measure
T^{-1}

hysteresis material constant **$h_B**
η_B

The maximum value of the loss factor due to hysteresis divided by the peak value of the flux density (in T^{-1}) of a soft magnetic material, operating in the Rayleigh region, at specified ambient temperature and frequency.

AAE014-005 = ambient temperature
AAE029-005 = frequency

$$\eta = \frac{\tan \delta_h}{\mu_r B_{peak}}$$

where $\tan\delta_h/\mu_r$ is the loss factor due to hysteresis and B_{peak} the value of the flux density.

IEC 60050 (221) (1990)

REMARKS:
Rayleigh region: In the graphic representation of the relation between the magnetic flux density and the magnetic field strength in a material, a region near the origin within which the flux density can be described by a quadratic function of the field strength.

AAF307-005 **02** **NR3 S..3.3ES2** **E25**
level minTypMax real measure
K^{-1}

temperature factor of permeability **$a_F**
temperature factor of reluctivity α_F

The value as specified by level (minTypMax) of the negative of the change in the permeability due to a change in temperature, divided by that change in temperature (in K^{-1}) of a soft magnetic material at specified frequency.

AAE029-005 = frequency

$$\alpha_F = -\frac{\frac{1}{\mu_\theta} - \frac{1}{\mu_{ref}}}{\theta - \theta_{ref}} = \frac{\mu_\theta - \mu_{ref}}{\mu_\theta \mu_{ref} (\theta - \theta_{ref})}$$

where μ_Θ and μ_{ref} are the permeabilities at temperatures Θand Θ_{ref} respectively.

IEC 60050 (221) (1990)

AAF308-005 **01** **NR3..3.3ES2** **E19**
level typ real measure
T

saturation flux density **B_s**
B_s

The typical value of the magnetic flux density (in T) at saturation of a soft magnetic material at specified ambient temperature.

ANSI/IEEE Std 100 (1988)

REMARKS:
1 Saturation:
The state of a material subjected to an external magnetic field so strong that the magnetic polarisation cannot be substantially increased by increasing that field.
IEC 60050 (901) (1996)
2 The saturation magnetisation is equal to the spontaneous magnetisation.

AAF309-005 **01** **M..17** **A52**
simple string

accessory name **accessory name**

Name of the accessory of a soft magnetic part to be used in the assembly of inductors and transformers.

AAF311-007 **01** **X..8** **A57**
simple non-quantitative code

material type **material type**

Code of the type of material.

ACO = acoustical
DIEL = dielectric and insulating
MG = magnetic
OP = opticalc
PWL = printed-wiring laminate
TH = thermal-electric

AAF312-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

time t_1 **@t_1**
$@t_1$

The begin time t_1 (in s) of a time interval during which a quantity is applied to a product, as a variable.

REMARKS:
See AAF313-005 for the end time t_2.

AAF313-005 **02** **NR3..3.3ES2** **T07**
simple real measure
s

time t_2 **@t_2**
$@t_2$

The end time t_2 (in s) of a time interval during which a quantity is applied to a product, as a variable.

REMARKS:
See AAF312-005 for the start time t_1.

AAF314-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

focusing voltage limiting **V_foc(lim)**
$V_{foc(lim)}$

The design maximum limiting value of the direct voltage (in V), on grid 3 with respect to grid 1, for focusing of a colour display tube.

AAF315-005 **01** **NR3..3.3ES2** **E06**
level max real measure
V

anode voltage limiting **V_a(lim)**
$V_{a(lim)}$

The maximum limiting direct voltage (in V) on the anode of a display tube.

AAF316-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

hole pitch **p_hole**
p_{hole}

The nominal pitch (in m) of the holes of an electric/electronic or electromechanical component parallel to the x-coordinate.

AAF317-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange length **l_flange**
l_{flange}

The value as specified by level (miNoMax) of the length (in m) of the flange of a component in the x-direction.

AAF318-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange breadth **b_flange**
B_{flange}

The value as specified by level (miNoMax) of the breadth (in m) of the flange of a component in the y-direction.

AAF319-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange height **h_flg**
h_{flg}

The value as specified by level (miNoMax) of the height (in m) of the flange of an electric/electronic or electromechanical component.

AAF320-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

body diameter **d_body**
d_{body}

The value as specified by level (miNoMax) of the diameter (in m) of the body of an electric/electronic or electromechanical component.

AAF321-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pitch (x-axis) **p_x**
p_x

The nominal pitch (in m) of the terminals of an electric/electronic or electromechanical component parallel to the x-coordinate.

AAF322-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pitch (y-axis) **p_y**
p_y

The nominal pitch (in m) of the terminals of an electric/electronic or electromechanical component parallel to the y-coordinate.

AAF323-005 **01** **M..8** **A56**
simple non-quantitative code

interface compatibility **compatibility**

The interface compatibility of the digital IC inputs and outputs with the peripheral circuits.

CMOS = directly compatible with CMOS circuits.
TTL = directly compatible with TTL circuits.

AAF324-005 **01** **M..35** **A56**
simple non-quantitative code

instruction set **instruction set**

Code identifying the instruction set of an IC microcontroller or microprocessor.

68000 = instruction set 68000
8048 = instruction set 8048
8048 enh = enhanced instruction set 8048
8051 = instruction set 8051

AAF325-005 **01** **M..35** **A56**
simple non-quantitative code

interrupt type **interrupt type**

Code identifying the interrupt type of a microcontroller or microprocessor.

external = externally vectored
internal = internally vectored
maskable = maskable
non-mask = non-maskable
priority = priority
software = software generated

AAF326-005 **01** **M..17** **A56**
simple non-quantitative code

addressing mode **addressing mode**

Code identifying the addressing modes of a microcontroller or microprocessor.

direct a = direct address
immediat = immediate address
indexed = indexed address
indirect = indirect address
relative = relative address

AAF327-005 **01** **NR3..3.3ES2** **J01**
level nom real measure
1

on-chip memory **n_word(on-chip)**
$n_{word(on\text{-}chip)}$

The number of words specifying the size of an on-chip memory function of a microcontroller, of a specified storage type.

AAF334-005 = storage type

AAF328-005 **01** **NR1..4** **J01**
level nom integer measure
bit

I/O bus width **I/O bus width**
I/O bus width

The width of the address bus (in bit) of a microcontroller or microprocessor, to supply an address for I/O purposes.

AAF329-005 **02** **NR1..4** **Q56**
level nom integer measure
1

number of peripherals **n_peri**
n_{peri}

Number of peripherals of a microcontroller of a specified peripheral type.

AAF335-005 = peripheral type

AAF330-005 **01** **NR1..4** **Q62**
level nom integer measure
bit

peripheral word size **peri word size**
peri word size

The number of bits applicable to a peripheral on a microcontroller of a specified peripheral type.

AAF335-005 = peripheral type

AAF331-006 **01** **NR3..3.3ES2** **T07**
level max real measure
s

refresh time interval **t_rf**
refresh time t_{rf}
refresh period t_{ref}

The maximum time interval (in s) between the beginnings of successive signals that are intended to restore the level in a DRAM cell to its original level, in a temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

JESD 100B.01 (2002)

AAF332-005 **03** **NR3 S..3.3ES2** **E01**
level minTypMax real measure
A

data retention current **I_DDR**
I_{DDR}

The value as specified by level (minTypMax) of the supply current (in A) during data retention of an SRAM at specified supply voltage and an ambient temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAF333-005 **01** **NR2 S..3.3** **E06**
level min real measure
V

data retention voltage **V_DDR**
V_{DDR}

The minimum supply voltage (in V), applied to an SRAM, for which data integrity is guaranteed.

AAF334-005 **01** **M..8** **A56**
simple non-quantitative code

storage type **@storage-type**

Code of the type of on-chip storage of a microcontroller.

EEPROM = electrically erasable ROM
MROM = mask programmed ROM
RAM = RAM
UVPROM = UV erasable ROM

AAF335-005 **01** **M..3** **A56**
simple non-quantitative code

peripheral type **@peri type**

Code of the peripheral type of a microcontroller.

TIM = timer
ADC = analogue-digital converter
INT = external interrupt line
PIO = parallel I/O port
PWM = pulse-width modulated output line
SIO = serial I/O port

AAF336-005 **01** **NR3 S..3.3ES2** **E01**
level max real measure
A

standby current chip disabled I_SB
standby current I_{SB}
I_{SBL}
I_{SBLL}

The maximum standby supply current (in A) of an SRAM with the chip disabled, at specified input voltage, in a temperature range between specified temperatures (T_1 and T_2).

AAE224-005 = input voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
Some static RAM's (SRAMS) are selected on standby current. These selections have then as suffix L and LL. The symbols of the respective standby current are then S_{BL} and S_{BLL}.

AAF337-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

pitch circle diameter **d_p**
d_p

The nominal diameter (in m) of the pitch circle of the terminals of an electric, electronic or electromechanical component.

AAF338-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

terminal breadth **b_term**
b_{term}

The nominal breadth (in m) of the terminals of an electric, electronic or electromechanical component.

AAF339-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

terminal thickness **t_term**
t_{term}

The nominal thickness (in m) of the terminals of an electric, electronic or electromechanical component.

AAF340-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

offset (y-axis) **s_y**
s_y

The nominal offset (in m) of the terminals of an electric, electronic or electromechanical component parallel to the y-coordinate.

AAF341-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

offset (x-axis) **s_x**
s_x

The nominal offset (in m) of the terminals of an electric, electronic or electromechanical component parallel to the x-coordinate.

AAF342-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange diameter **d_flg**
d_{flg}

The value as specified by level (miNoMax) of the diameter (in m) of the flange of an electric/electronic or electromechanical component.

AAF343-001 **01** **M..3** **A52**
simple non-quantitative code

mounting method **mounting-method**

Code of the mounting method of an electric/electronic or electromechanical component.

A = surface mounted
B = inserted
C = flange mounted
D = stud mounted

AAF344-001 **01** **M..3** **A58**
simple non-quantitative code

body shape **body-shape**

Code of the shape of the body of an electric/electronic or electromechanical component.

A = rectangular
B = elliptical shaped
C = horizontal cylindrical
D = vertical cylindrical
E = spherical
F = can shaped
G = vert cylindrical hex flange
H = vert cylindrical oval flange
J = vert cylindrical circ flange
K = rectangular rectangular flange
L = vert cylindrical rect flange

AAF345-001 **01** **M..3** **A58**
simple non-quantitative code

terminal exit position SMD **term-exit-posit**

Code indicating the exit position of the terminals of an electric/electronic or electromechanical component.

A = single 3
B = end
C = radial
D = dual 3 (1+2)
E = dual 4 (2+2)
F = dual 4 (1+3)
G = dual n
H = triple
J = quad

AAF346-001 **02** **M..3** **A58**
simple non-quantitative code

terminal exit position non-SMD **term-exit-SMD**

Code indicating the exit position of the terminals of electric/electronic or electromechanical components.

A = axial
B = radial
C = two terminals on axis
D = two terminals offset
E = diagonal
F = on circle
G = four (x+y)
H = upper
J = one row
K = dual
L = grid array

AAF347-001 **02** **M..3** **A58**
simple non-quantitative code

terminal shape non-SMD **term-shape**

Code of the terminal shape of an electric/electronic or electromechanical component.

A = straight
B = 90 deg bend
C = 180 deg bend
D = SIL offset bend
E = DIL staggered bend
F = DIL staggered offset bend
G = QUIL staggered offset bend

AAF348-001 **01** **M..3** **A58**
simple non-quantitative code

terminal shape SMD **term-shape-SMD**

Code of the terminal shape of an electric/electronic or electromechanical component.

A = straight
B = gull wing
C = J-bend
D = J-inverted bend
E = S-bend
F = wraparound
G = C-bend
H = cap
J = metallized

AAF349-001 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω

insulation resistance **R_ins**
R_{ins}

The minimum insulation resistance (in ohms) of a fixed resistor measured according to the V-block method at specified direct voltage.

AAE013-005 = voltage (dc)

IEC 60115-1 (2001)

REMARKS:
The insulated resistance shall be measured according to the V-block method described in IEC 60115-1.

AAF350-001 **01** **NR3 S..3.3ES2** **H03**
level minMax real measure
K^{-1}

temperature coefficient **TC**
TC

The value as specified by the level (minMax) of the temperature coefficient (in K^{-1}) of a fixed resistor in the temperature range between specified temperatures (T_1 and T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

IEC 60115-1 (1999)

AAF351-001 **01** **NR1..4** **Q56**
level nom integer measure
1

number of holes **N_hole**
N_{hole}

The number of holes in an electric, electronic or electromechanical component.

AAF352-001 **01** **M..3** **A52**
simple non-quantitative code

basic aspect **basic aspect**

Code of the basic aspect of the shape of an electric/electronic or electromechanical component.

BSH = body shape
MMT = mounting method
TPN = terminal exit position non SMD
TPS = terminal exit position SMD
TSN = terminal shape non SMD
TSS = terminal shape SMD

AAF353-001 **01** **M..8** **A58**
simple string

size code EIA **size-EIA**

EIA code of the size of an electric/electronic component for placement on printed wiring board.

REMARKS:
The complete code consists of four numerical characters.
a) the first two numerical characters represent the value of the length in inches.
b) the second two numerical characters represent the value of the width in inches.

AAF356-001 **01** **M..8** **A58**
simple non-quantitative code

reference view **ref view**

The code indicating the angle of vision on a component.

BOTTOM = bottom
FRONT = front
SIDE = side
TOP = top

AAF357-001 **01** **M..3** **A56**
simple string

terminal identifier **terminal id**

The character used to identify a specific terminal of a component.

REMARKS:
Rules should be established how the identifying process should take place.

AAF358-001 **01** **M..3** **A56**
simple string

swapability indicator **swap ind**

The mark that indicates whether the terminal pairs or terminal groups of one function or one component may be exchanged.

REMARKS:
Rules should be established for the identification of swapable terminal pairs respectively terminal groups.

AAF359-001 **01** **M..3** **A56**
simple string

permutability indicator **perm ind**

The mark that indicates whether the terminals of one function or one component may be exchanged.

REMARKS:
Rules should be established for the identification of permutable terminals.

AAF360-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

max range value **max range value**
max range value

The maximum value of nominal capacitance (in F) of a capacitor that is available within a specific E-series.

AAF361-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

min range value **min range value**
min range value

The minimum value of nominal capacitance (in F) of a capacitor that is available within a specific E-series.

AAF362-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

centre of gravity (x-axis) **C_grav(x-axis)**
$C_{grav(x\text{-}axis)}$

The nominal value of the x-displacement (in m) of the centre of gravity of a component related to the reference point of that component.

AAF363-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

centre of gravity (y-axis) **C_grav(y-axis)**
$C_{grav(y\text{-}axis)}$

The nominal value of the y-displacement (in m) of the centre of gravity of a component related to the reference point of that component.

AAF364-001 **01** **M..17** **A91**
simple non-quantitative code

probability distribution **prob distr**

The name of a function giving the probability that a random variable takes any given value or belongs to a given set of values.

NOTE
The probability on the whole set of values of the random variable equals 1.

BINOMIAL = binomial distribution
NORMAL = normal distribution (Laplace-Gauss)
POISSON = Poisson distribution

AAF365-001 **01** **NR3..3.3ES2** **Q59**
level nom real measure
1

normal average value **$m**
μ

The value of the average in a Normal (Laplace-Gauss) probability distribution.

AAF366-001 **01** **NR3..3.3ES2** **Q59**
level nom real measure
1

normal standard deviation **$s**
σ

The value of the standard deviation in a Normal (Laplace-Gauss) probability distribution.

AAF367-001 **01** **NR3..3.3ES2** **Q59**
level nom real measure
1

Poisson variance value **m**
m

The value of the variance in a Poisson probability distribution.

AAF368-001 **01** **NR3..3.3ES2** **Q59**
level nom real measure
1

Poisson expectation value **m**
m

The value of the expectation in a Poisson probability distribution.

AAF369-001 **01** **NR2..3.3** **E06**
level nom real measure
1

test voltage coefficient **k_V(test)**
$k_{V(test)}$

The factor by which the rated voltage has to be multiplied to obtain the value of the test voltage to be applied to a device under test.

CECC 30.000

AAF370-001 **01** **M..17** **A59**
simple string

MIL specification **MIL spec**

MIL code of the specification in which an electric, electronic or electromechanical component is released under the MIL quality assessment system.

MIL 883-B

REMARKS:
MIL : Military specification or standard (USA)
Quality assessment :
The continuous surveillance of the manufacturer of a product to ensure that it conforms to the requirements of the specification to which it was made.

AAF371-001 **01** **M..8** **A58**
simple non-quantitative code

adjuster placement **adjuster-place**

Code of the placement of an adjuster on an electric, electronic component for placement on printed-circuit boards.

BACK = back +Y axis
BOTTOM = bottom -Z axis
FRONT = front -Y axis
LEFT = left -X axis
RIGHT = right +X axis
TOP = top +Z axis

AAF372-001 **01** **M..8** **A58**
simple non-quantitative code

preformed lead **preformed lead**

Code of the preforming of leads to create a distance between the component and the seating-plane.

BENT = bent (90 deg)
CROPPED = cropped
FLANGE = with flange
SHOULDER = shoulderd
SNAPIN = snap-in
SPACED = spaced
STRAIGHT = straight

AAF373-001 **01** **NR1..4** **Q56**
level nom integer measure
1

number of studs **N_std**
N_{std}

The number of studs on an electric/electronic or electromechanical component designed for fastening.

AAF374-001 **01** **NR1..4** **Q56**
level nom integer measure
1

number of pitches (x-axis) **N_p(x)**
$N_{p(x)}$

The number of pitches between the terminals of an electric/electronic or electromechanical component parallel to the x-coordinate.

AAF375-001 **01** **NR1..4** **Q56**
level nom integer measure
1

number of pitches (y-axis) **N_p(y)**
$N_{p(y)}$

The number of pitches between the terminals of an electric/electronic or electromechanical component parallel to the y-coordinate.

AAF376-001 **01** **M..3** **A58**
simple non-quantitative code

terminal cross-section shape **term-cross-shp**

Code of the cross-section shape of the terminals of an electric/electronic or electromechanical component.

CIR = circular
REC = rectangular

AAF388-001 **01** **M..17** **A58**
simple string

case size **case size**

Combination of the reference to a coding system for case sizes and the code of a specific case size within that system of a component.

REMARKS:
Example of a format for the reference to a JEDEC publication: JESD30(PLCC)

AAF389-001 **01** **NR1..4** **H07**
level max integer measure
W

non-rep peak reverse power diss **P_ZSM**
P_{ZSM}
P

The maximum non-repetitive peak reverse power dissipation (in W) of a stabilising diode at an exponential current function with specified front time, time to half-value and junction temperature prior to the application of the pulse.

AAE271-005 = junction temperature
AAE332-005 = virtual front time
AAE333-005 = virtual time to half-value

REMARKS:
Current pulse according to the specification given in IEC 60060-1, section 8 (1989).

AAF390-002 **01** **X..8** **A56**
simple non-quantitative code

type of inductor **inductor-type**

Code identifying the function or application for which the inductor has been developed initially.

ANT = antenna inductors
CHOKE = choke
COIL = coil
DFL = deflection coil
LINUNIT = linearity control unit
SOL = solenoids

AAF391-001 **02** **X..3** **A56**
simple non-quantitative code

connect-node code **conn-node code**

Code of the type of connect node of a component

E = electrical
F = functional
L = linkage
M = matter(material)
MG = gaseous
ML = liquid
MS = solid
O = optical fibre
W = wave propagation

AAF392-001 **01** **X..8** **A58**
simple non-quantitative code

project view code **proj-view code**

Coded abbreviation of the two dimensional projection view of an item.

ABOVE = view from above
BELOW = view from below
FRONT = view from the front
LEFT = view from the left
REAR = view from the rear
RIGHT = view from the right

REMARKS:
The reference point for all projection views shall be defined as the centre of the view from the front at the seating plane.

AAF393-001 **04** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

x-coordinate of the reference point **x-coor ref pt**
x-coor ref point

The value as specified by level (miNoMax) of the distance on the x-axis (in m) of the reference point to the zero-point.

AAF394-001 **04** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

y-coordinate of the reference point **y-coor ref pt**
y-coor ref point

The value as specified by level (miNoMax) of the distance on the y-axis (in m) of the reference point to the zero-point.

AAF395-001 **04** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

z-coordinate of the reference point **z-coor ref pt**
z-coor ref point

The value as specified by level (miNoMax) of the distance on the z-axis (in m) of the reference point to the zero-point.

AAF396-001 **01** level nom **NR2..3.3** real measure 1 **T03**

scale **scale** scale

The value of the denominator of the ratio of the real things magnitude to the magnitude of the model.

AAF397-001 **01** level nom **NR3..3.3ES2** real measure m^2 **T05**

net area **net area** net area

The value of the area (in m^2) of a two-dimensional plane defining the effective physical contour of a geometrical object.

AAF398-001 **02** level nom **NR3..3.3ES2** real measure m^2 **T05**

gross area **gross area** gross area

The value of the area (in m^2) of a two-dimensional plane associated with a geometrical object due to installation, protection, operation, service and maintenance reasons.

REMARKS:
- It encloses completely the net area of the geometrical object.
- The gross area is defined as a plane normally not possible to be occupied by other geometrical objects.

AAF399-001 **01** level nom **NR3..3.3ES2** real measure m^3 **T06**

net space **net space** net space

The value of the volume (in m^3) of a three-dimensional space defining the effective physical contours of a geometrical object.

AAF400-001 **02** level nom **NR3..3.3ES2** real measure m^3 **T06**

gross space **gross space** gross space

The value of the volume (in m^3) of a three-dimensional space associated with a geometrical object due to installation, protection, operation, service and maintenance reasons.

REMARKS:
- It encloses completely the net space of the geometrical object.
- The gross space is defined as a plane normally not possible to be occupied by other geometrical objects.

AAF401-001 **02** level nom **NR3..3.3ES2** real measure m **T03**

x-coor preferred mounting position **x-coor pref pos** x-coor pref pos

The value of the distance (in m) on the x-axis of the direction of the preferred mounting position of a component.

AAF402-001 **02** level nom **NR3..3.3ES2** real measure m **T03**

x-coor preferred mounting position **y-coor pref pos** y-coor pref pos

The value of the distance (in m) on the y-axis of the direction of the preferred mounting position of a component.

AAF403-001 **02** level nom **NR3..3.3ES2** real measure m **T03**

z-coor preferred mounting position **z-coor pref pos** z-coor pref pos

The value of the distance (in m) on the z-axis of the direction of the preferred mounting position of a component.

AAF404-001 **01** **NR2..3.3** **T01**
level nom real measure
deg

mounting deviation y/z **mount dev y/z**
mount dev y/z

Specification of the absolute value of the angle (in deg), indicating the maximum rotation deviation from the y-axis within the y/z plane of the three-dimensional coordinate system, under which the device fulfils its terms of operation.

AAF405-001 **01** **NR2..3.3** **T01**
level nom real measure
deg

mounting deviation y/x **mount dev y/x**
mount dev y/x

Specification of the absolute value of the angle (in deg), indicating the maximum rotation deviation from the y-axis within the y/x plane of the three-dimensional coordinate system, under which the device fulfils its terms of operation.

AAF406-001 **02** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

x-coordinate position location **x-coor pos-loc**
x-coor pos-loc

The value as specified by level (miNoMax) of the length (in m) of the x-coordinate of the location of a point on the symmetry-axis of a constructive solid geometry primitive.

AAF407-001 **02** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

y-coordinate position location **y-coor pos-loc**
y-coor pos-loc

The value as specified by level (miNoMax) of the length (in m) of the y-coordinate of the location of a point on the symmetry-axis of a constructive solid geometry primitive.

AAF408-001 **02** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

z-coordinate position location **z-coor pos-loc**
z-coor pos-loc

The value as specified by level (miNoMax) of the length (in m) of the z-coordinate of the location of a point on the symmetry-axis of a constructive solid geometry primitive.

AAF409-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

cylinder radius **r_cyl**
r_{cyl}

The value of the radius (in m) of a cylinder.

AAF410-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

cylinder height **h_cyl**
h_{cyl}

The value as specified by level (miNoMax) of the distance (in m) between the two planar circular faces of a cylinder.

AAF411-001 **02** **NR2 S..3.3** **T01**
level nom real measure
deg

angle axis to x-axis **$a_x**
α_x

The value of the angle (in deg) between the orientation of the axis of a constructive solid geometry primitive and the X-axis of the placement coordinate system.

AAF412-001 **02** **NR2 S..3.3** **T01**
level nom real measure
deg

angle axis to y-axis **$a_y**
α_y

The value of the angle (in deg) between the orientation of the axis of a constructive solid geometry primitive and the Y-axis of the placement coordinate system.

AAF413-001 **02** **NR2 S..3.3** **T01**
level nom real measure
deg

angle axis to z-axis **$a_z**
α_z

The value of the angle (in deg) between the orientation of the axis of a constructive solid geometry primitive and the Z-axis of the placement coordinate system.

AAF414-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

cone radius **r_cone**
r_{cone}

The value of the radius (in m) of the cone on the axis at the top of a right circular cone.

AAF415-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

cone height **h_cone**
h_{cone}

The value as specified by level (miNoMax) of the distance (in m) between the two planar circular faces of a right circular cone, if the radius is greater than zero: or from the base to the apex if the radius equals zero.

AAF416-001 **01** **NR2..3.3** **T01**
level nom real measure
deg

semi angle **$a_semi**
α_{semi}

The value of the angle (in deg) between the axis of the cone and the generator of the conical surface of a right circular cone.

AAF417-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

sphere radius **r-sphere**
r_{sphere}

The value of the length of the radius (in m) of a sphere.

AAF418-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

x-coordinate of centre **x-c_sphere**
$x\text{-}c_{sphere}$

The value as specified by level (miNoMax) of the distance (in m) on the x-axis of the centre of a sphere.

AAF419-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

y-coordinate of centre **y-c_sphere**
$y\text{-}c_{sphere}$

The value as specified by level (miNoMax) of the distance (in m) on the y-axis of the centre of a sphere.

AAF420-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

z-coordinate of centre **z-c_sphere**
$z\text{-}c_{sphere}$

The value as specified by level (miNoMax) of the distance (in m) on the z-axis of the centre of a sphere.

AAF421-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

major radius of torus **r_(major-torus)**
$r_{(major\text{-}torus)}$

The value as specified by level (miNoMax) of the radius (in m) of the directrix of a torus.

AAF422-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

minor radius of torus **r_(minor-torus)**
$r_{(minor\text{-}torus)}$

The value as specified by level (miNoMax) of the radius (in m) of the generatrix of a torus.

AAF423-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

wedge x-size **x_wedge**
x_{wedge}

The value as specified by level (miNoMax) of the length (in m) of the right angular wedge along the placement X-axis.

AAF424-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

wedge y-size **y_wedge**
y_{wedge}

The value as specified by level (miNoMax) of the length (in m) of the right angular wedge along the placement Y-axis.

AAF425-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

wedge z-size **z_wedge**
z_{wedge}

The value as specified by level (miNoMax) of the length (in m) of the right angular wedge along the placement Z-axis.

AAF426-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

major edge **edge_major**
$edge_{major}$

The value as specified by level (miNoMax) of the length (in m) of the edge of the square base plane of a right angular pyramid.

AAF427-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

minor edge **edge_minor**
$edge_{minor}$

The value as specified by level (miNoMax) of the length (in m) of the edge of the square top plane of a right angular truncated pyramid.

AAF428-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

primitive height **h_prim**
h_{prim}

The value as specified by level (miNoMax) of the distance (in m) between the apex and the base plane or between the two parallel planes of a right constructive solid geometry primitive.

AAF429-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

edge-length **l_edge**
l_{edge}

The value as specified by level (miNoMax) of the length (in m) of the edge of a N-edged regular column.

AAF430-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

internal radius **r_inner**
r_{inner}

The value as specified by level (miNoMax) of the length (in m) of the inner radius of a right circular tube.

AAF431-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

external radius **r_outer**
r_{outer}

The value as specified by level (miNoMax) of the length (in m) of the outer radius of a right circular tube.

AAF432-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

minor radius **r_minor**
r_{minor}

The value as specified by level (miNoMax) of the length (in m) of the radius of the circular plane of a spherical segment.

AAF433-001 **01** **M..175** **A56**
simple string

installation instruction **install-instruc**

The text giving additional information with respect to the installation of a component.

AAF434-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

bending radius **r_bend**
r_{bend}

The value, as specified by the manufacturer, of the maximum allowed radius (in m) when bending a conductor or connector into a curve.

AAF435-001 **01** **M..3** **A58**
simple non-quantitative code

terminal connection type **term-conn-type**

Code of the type of connection a terminal or connector is being designed for

1 = soldered
10 = flat
2 = welded
5 = screwed
6 = wire-wrapped
7 = termi-point
8 = insulation displacement connection

AAF436-001 **01** **NR2..3.3** **T07**
level nom real measure
1

simultaneity factor **F_simult**
F_{simult}

The value of the ratio of 1) the effective time of handling and 2) the maximum available time of handling of a component.

AAF437-001 **01** **NR1..4** **Q56**
level nom integer measure
1

column type **n_column**
number of columns n_{column}

The value indicating the number of corners defining the column type.

AAF440-001 **01** **X..8** **A52**
simple non-quantitative code

features **features**

Code of a main feature class

CPLX = complex number value
TOL = toleranced value

AAF441-001 **01** **X..8** **A52**
simple non-quantitative code

complex numbers **complex nos**

Code of a feature class containing values expressed as complex numbers.

ADM = admittance
IMP = impedance

AAF442-001 **01** **X..8** **A52**
simple non-quantitative code

toleranced values **tol values**

Code of a feature class containing values with tolerances.

TOLCAP = toleranced capacitance
TOLRES = toleranced resistance

AAF443-001 **01** **NR2 S..3.3** **R71**
level nom real measure
%

symmetric tolerance **%tol**
percentage tolerance %tol

The percentage tolerance (in %) on the nominal value of a characteristic property where both positive and negative tolerance values are equal.

AAF444-001 **01** **NR2 S..3.3** **R71**
level nom real measure
%

negative tolerance **%tol-**
%tol-

The negative value of the percentage tolerance (in %) on the nominal value of a characteristic property where positive and negative tolerance values are unequal.

AAF445-001 **01** **NR2 S..3.3** **R71**
level nom real measure
%

positive tolerance **%tol+**
%tol+

The positive value of the percentage tolerance (in %) on the nominal value of a characteristic property where positive and negative tolerance values are unequal.

AAF446-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

capacitance **C**
C

The nominal value of the capacitance (in F) of an electric component having a capacitance property.

AAF447-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

symmetric capacitance tolerance **C_tol**
C_{tol}

The absolute tolerance (in F) on the nominal value of the capacitance of an electric component where both positive and negative tolerance values are equal.

AAF448-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

negative capacitance tolerance **C_tol-**
C_{tol-}

The negative value of the absolute tolerance (in F) on the nominal value of the capacitance of an electric component where positive and negative tolerance values are unequal.

AAF449-001 **01** **NR3..3.3ES2** **E09**
level nom real measure
F

positive capacitance tolerance **C_tol+**
C_{tol+}

The positive value of the absolute tolerance (in F) on the nominal value of the capacitance of an electric component where positive and negative tolerance values are unequal.

AAF450-001 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

resistance **R**
R

The nominal value of the resistance (in ohms) of an electric component having a resistance property.

AAF451-001 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

symmetric resistance tolerance **R_tol**
R_{tol}

The absolute tolerance (in ohms) on the nominal value of the resistance of an electric component where both positive and negative tolerance values are equal.

AAF452-001 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

negative resistance tolerance **R_tol-**
R_{tol-}

The negative value of the absolute tolerance (in ohms) on the nominal value of the resistance of an electric component where positive and negative tolerance values are unequal.

AAF453-001 **01** **NR3..3.3ES2** **E33**
level nom real measure
Ω

positive resistance tolerance **R_tol+**
R_{tol+}

The positive value of the absolute tolerance (in ohms) on the nominal value of the resistance of an electric component where positive and negative tolerance values are unequal.

AAF454-001 **01** **NR1 S1..3** **E43**
level miNoMax integer measure
deg

phase angle **$f**
φ

The value as given by level (miNoMax) of the phase angle (in deg) of a complex electrical quantity.

AAF455-001 **01** **NR3 S..3.3ES2** **E43**
level miNoMax real measure
rad

phase angle **$f**
φ

The value as given by level (miNoMax) of the phase angle (in rad) of a complex electrical quantity.

AAF456-001 **01** **NR3..3.3ES2** **E44**
level miNoMax real measure
Ω

modulus of impedance **Z**
absolute value of impedance Z

The modulus or absolute value as given by level (miNoMax) of the impedance (in ohms) of an electric component having an impedance property.

AAF457-001 **01** **NR3..3.3ES2** **E44**
level miNoMax real measure
Ω

resistance **R**
R

The reactive or imaginary part as given by level (miNoMax) of the impedance (in ohms) of an electric component having an impedance property.

AAF458-001 **01** **NR3..3.3ES2** **E44**
level miNoMax real measure
Ω

reactance **S**
S

The resistive or real part as given by level (miNoMax) of the impedance (in ohms) of an electric component having an impedance property.

AAF459-001 **01** **NR3..3.3ES2** **E45**
level miNoMax real measure
S

modulus of admittance **Y**
absolute value of admittance Y

The modulus or absolute value as given by level (miNoMax) of the admittance (in S) of an electric component having an admittance property.

AAF460-001 **01** **NR3..3.3ES2** **E45**
level miNoMax real measure
S

conductance **G**
G

The reactive or imaginary part as given by level (miNoMax) of the admittance (in S) of an electric component having an admittance property.

AAF461-001 **01** **NR3..3.3ES2** **E45**
level miNoMax real measure
S

susceptance **B**
B

The resistive or real part as given by level (miNoMax) of the admittance (in S) of an electric component having an admittance property.

AAF462-001 **01** **E09**
class instance AAA238-001

toleranced capacitance **C**
C

The value of the capacitance of a fixed capacitor together with its tolerances at specified frequency and at reference conditions.

AAE029-005 = frequency
AAE995-005 = reference conditions

AAF463-001 **01** **E33**
class instance AAA239-001

toleranced resistance **R**
R

The value of the resistance of a fixed linear resistor together with its tolerances at specified reference conditions.

AAE995-005 = reference conditions

AAF464-001 **01** **M..8** **A56**
simple non-quantitative code

connector part type **connector part**

Code of the type of a connector part.

ACCY = connector accessory
CONTACT = connector contact
INSERT = connector insert
SHELL = connector shell
TOOL = connector tool

AAF465-001 **01** **M..80** **A56**
simple string

accessory type **accessory**

Description of the type of connector accessory.

AAF466-001 **01** **M..80** **A56**
simple string

tool type **tool**

Description of the type of tool to be used with a connector.

AAF467-001 **01** **M..80** **A56**
simple string

shell type **shell**
housing type

Description of the type of connector shell

AAF468-001 **01** **M..80** **A56**
simple string

insert type **insert**

Description of the type of connector insert

AAF469-001 **01** **M..80** **A57**
simple string

insert material **insert material**

Description of the type of material of which a connector insert is made.

AAG000-001 **01** **X..3** **A52**
simple non-quantitative code

geometry type **geometry type**

Code of the type of geometry possessed by an electric-electronic component.

DIE = Die devices
PAK = Package outlines

AAG001-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

seated height **A**
mounted height A

The distance (in m) as specified by level (miNoMax) of the furthest part of the component above the seating plane, measured in a direction perpendicular to the plane.

BS3934-1: 1992

DAE001-001 Package length, width and height

AAG002-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

stand-off height **A_1**
clearance A_1

The perpendicular distance (in m) as specified by level (miNoMax) between the seating plane and the base plane.

BS3934 issue 1 : 1975

DAE001-001 Package length, width and height

AAG003-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

package height **A_2**
package thickness A_2

The distance (in m) as specified by level (miNoMax) of the furthest part of the component above the base plane, measured in a direction perpendicular to the plane.

BS3934 issue 1 : 1975

DAE001-001 Package length, width and height

AAG004-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal circle diameter **$fa**
Øa

The diameter (in m) as specified by level (miNoMax) of the circle upon which the terminal positions are located.

NOTE
Where there is more than one terminal circle present, Øa is the diameter of the largest circle.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG005-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

stand-off major dimension **B**
shoulder width B

The major dimension (in m) as specified by level (miNoMax) of the cross-section of the stand-off.

NOTE
This dimension applies to a separate stand-off or to the width of the wider section of shouldered terminations which have the effect of standing the component off from the seating plane.

BS3934 issue 1 : 1975

DAE005-001 In-line package dimensions

AAG006-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

stand-off minor dimension B_1
shoulder thickness B_1

The minor dimension (in m) as specified by level (miNoMax) of the cross-section of the stand-off.

NOTE
This dimension applies to a separate stand-off or to the thick-ness of the wider section of shouldered terminations which have the effect of standing the component off from the seating plane.

BS3934 issue 1 : 1975

AAG007-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

stand-off diameter $fB
ØB

The diameter (in m) as specified by level (miNoMax) of the cross-section of the stand-off.

BS3934 issue 1 : 1975

AAG008-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal width b
lead width b

The width (in m) as specified by level (miNoMax) of a square terminal or the length of the major axis of a terminal with a rectangular cross-section.

NOTE
This dimension applies to that part of the terminal which is or may be used for connection to the circuit in which it is mounted.

BS3934 issue 1 : 1975

DAE005-001 In-line package dimensions

AAG009-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal diameter $fb
lead diameter Øb

The diameter (in m) as specified by level (miNoMax) of the circumscribed circle containing the terminal.

BS3934 issue 1 : 1975

REMARKS:
The terminal need not have a circular cross-section.

DAE009-001 Lead lengths and diameters

AAG010-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal diameter $fb_0
lead diameter $Øb_0$

The diameter (in m) as specified by level (miNoMax) of the circumscribed circle containing the terminal.

NOTE
$Øb_0$ refers to the terminal diameter over the terminal length defined by L_0.

BS3934 issue 1 : 1975

REMARKS:
The terminal need not have a circular cross-section.

DAE009-001 Lead lengths and diameters

AAG011-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal diameter $fb_2
lead diameter $Øb_2$

The diameter (in m) as specified by level (miNoMax) of the circumscribed circle containing the terminal.

NOTE
$Øb_2$ refers to the terminal diameter over the terminal length defined by $L_2 – L_1$.

BS3934 issue 1 : 1975

REMARKS:
The terminal need not have a circular cross-section.

AAG012-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal thickness **c**
lead thickness c

The length (in m) as specified by level (miNoMax) of the minor axis of a terminal with a rectangular cross-section.

NOTE
This dimension applies to that part of the terminal which is or may be used for connection to the circuit in which it is mounted.

BS3934 issue 1 : 1975

DAE012-001 Terminal splay dimensions

AAG013-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package length **D**
D

The major dimension (in m) as specified by level (miNoMax) of the package, excluding terminals presented for mounting in the length direction, measured in a plane parallel to the seating plane.

NOTE
If terminals presented for mounting in the width direction extend beyond the ends of the package body the package length includes the width of such terminals.

BS3934 issue 1 : 1975

REMARKS:
If terminals are present on one or two sides of the package only, they are deemed to extend in the width direction.

DAE001-001 Package length, width and height

AAG014-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package diameter **$fD**
ØD

The major diameter (in m) as specified by level (miNoMax) of the package, excluding terminals, measured in a plane parallel to the seating plane.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG015-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

stand-off spacing **d**
d

The linear spacing (in m) as specified by level (miMoMax) between true positions of centres of stand-offs.

BS3934 issue 1 : 1975

AAG016-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package width **E**
E

The minor dimension (in m) as specified by level (miNoMax) of the package, excluding terminals, measured in a plane parallel to the seating plane.

BS3934 issue 1 : 1975

REMARKS:
If terminals are present on one or two sides of the package only, they are deemed to extend in the width direction.

DAE001-001 Package length, width and height

AAG017-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal spacing **e**
lead spacing e

The linear spacing (in m) as specified by level (miNoMax) between the true positions of terminal centres.

BS3934 issue 1 : 1975

DAE005-001 In-line package dimensions

AAG018-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

flange zone height **F**
F

The overall dimension (in m) as specified by level (miNoMax) of the flange zone, including any fillet, measured in a perpendicular direction from the base plane.

BS3934 issue 1 : 1975

AAG019-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

flange height **F_1**
flange thickness F_1

The overall dimension (in m) as specified by level (miNoMax) of the flange zone, excluding any fillet, measured in a perpendicular direction from the base plane.

BS3934 issue 1 : 1975

AAG020-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package length zone **G_D**
G_D

The length (in m) as specified by level (miNoMax) of a zone in the direction of the package length which includes the package length, package irregularities and the uncontrolled part of any terminals which are presented for mounting in the length direction.

BS3934 issue 1 : 1975

AAG021-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package width zone **G_E**
G_E

The length (in m) as specified by level (miNoMax) of a zone in the direction of the package width which includes the package width, package irregularities and the uncontrolled part of any terminals which are presented for mounting in the width direction.

BS3934 issue 1 : 1975

DAE021-001 Package overall widths

AAG022-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package diameter zone **$fG**
ØG

The diameter (in m) as specified by level (miNoMax) of a zone which includes the package diameter, package irregularities and the uncontrolled part of any terminals which are presented for mounting radially.

BS3934 issue 1 : 1975

AAG023-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

overall length **H_D**
H_D

The largest overall dimension (in m) as specified by level (miNoMax) in the direction of the package length which includes the package length and any terminals which are presented for mounting in the length direction.

BS3934 issue 1 : 1975

AAG024-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

overall width **H_E**
H_E

The largest overall dimension (in m) as specified by level (miNoMax) in the direction of the package width which includes the package width and any terminals which are presented for mounting in the width direction.

BS3934 issue 1 : 1975

DAE021-001 Package overall widths

AAG025-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

overall diameter **$fH**
ØH

The largest overall diameter (in m) as specified by level (miNoMax) which includes all terminals which are presented for mounting radially.

BS3934 issue 1 : 1975

AAG026-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

index height **h**
index depth h

The height or depth (in m) as specified by level (miNoMax) of an index feature.

BS3934 issue 1 : 1975

AAG027-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

index width **j**
j

The width (in m) as specified by level (miNoMax) of an index feature.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG028-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

index length **k**
k

The length (in m) as specified by level (miNoMax) of an index feature.

NOTE
On cylindrical packages, the index length (e.g. tab) is measured from the overall diameter *D of the device.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG029-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **L**
lead length L

The length (in m) as specified by level (miNoMax) of terminal available for mounting measured from the seating plane.

BS3934 issue 1 : 1975

DAE009-001 Lead lengths and diameters

AAG030-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **L_0**
lead length L_0

The length of terminal (in m) as specified by level (miNoMax) available for mounting measured from the seating plane.

NOTE
L_0 refers to that part of the terminal over which the diameter $Øb_0$ is closely controlled.

BS3934 issue 1 : 1975

DAE009-001 Lead lengths and diameters

AAG031-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **L_1**
lead length L_1

The length (in m) as specified by level (miNoMax) of terminal available for mounting measured from the seating plane.

NOTE
L_1 refers to that part of the terminal over which the diameter $Øb_1$ is closely controlled.

BS3934 issue 1 : 1975

DAE009-001 Lead lengths and diameters

AAG032-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **L_2**
lead length L_2

The length (in m) as specified by level (miNoMax) of terminal available for mounting measured from the seating plane.

NOTE
L_2 refers to that part of the terminal over which the diameter $Øb_2$ is closely controlled.

BS3934 issue 1 : 1975

AAG033-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length L_D
lead length L_D

The length (in m) as specified by level (miNoMax) of controlled terminal zone for mounting measured from the end of the terminal in the direction of the package length.

BS3934 issue 1 : 1975

AAG034-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length L_E
lead length L_E

The length (in m) as specified by level (miNoMax) of controlled terminal zone for mounting measured from the end of the terminal in the direction of the package width.

BS3934 issue 1 : 1975

DAE021-001 Package overall widths

AAG035-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

mounted length M_D
M_D

The overall length, (in m) as specified by level (miNoMax), in the package length direction which includes the package length and any terminals which are bent to be perpendicular to the seating plane.

BS3934 issue 1 : 1975

AAG036-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

mounted width M_E
M_E

The overall width, (in m) as specified by level (miNoMax), in the package width direction which includes the package width and any terminals which are bent to be perpendicular to the seating plane.

BS3934 issue 1 : 1975

DAE012-001 Terminal splay dimensions

AAG037-002 01 NR1..4 Q56
level Nom integer measure

quantity of terminal positions n
number of potential terminals n

The total quantity of potential terminal positions in accordance with the specified terminal designation system.

BS3934 issue 1 : 1975

REMARKS:
The actual quantity of terminals present may be less than n.

DAE004-001 Cylindrical package dimensions

AAG038-001 01 NR1..4 Q56
level Max integer measure

quantity of missing terminals n_1
n_1

The maximum quantity of potential terminal positions which can be unoccupied.

BS3934 issue 1 : 1975

AAG039-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

mounting hole diameter $fp
Øp

The diameter (in m) as specified by level (miNoMax) of the hole in the package used for mounting.

BS3934 issue 1 : 1975

DAE042-001 Oval flange-mount package dimensions

AAG040-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal emergence height Q
Q

The distance (in m) as specified by level (miNoMax) from the seating plane to the underside of the terminals where they emerge from the package.

BS3934 issue 1 : 1975

DAE040-001 Terminal emergence height

AAG041-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal emergence dimension Q_1
Q_1

The distance (in m) as specified by level (miNoMax) from the seating plane to the underside of the terminals where they emerge from the package.

BS3934 issue 1 : 1975

AAG042-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

mounting hole separation q
q

The distance (in m) as specified by level (miNoMax) between the centres of two mounting holes.

BS3934 issue 1 : 1975

DAE042-001 Oval flange-mount package dimensions

AAG043-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

curve radius r
r

The radius (in m) as specified by level (miNoMax) of a curve forming a part of the package outline.

BS3934 issue 1 : 1975

AAG044-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal reference position S
S

The distance (in m) as specified by level (miNoMax) from a reference line to the centre of a terminal position.

BS3934 issue 1 : 1975

AAG045-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal reference position s
s

The distance (in m) as specified by level (miNoMax) from a line through the centres of two terminal positions to the centre of the mounting hole which is furthest from the line.

BS3934 issue 1 : 1975

DAE042-001 Oval flange-mount package dimensions

AAG046-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

package overhang Z
Z

The distance (in m) as specified by level (miNoMax) from the end terminal true position to the extremity of the package.

BS3934 issue 1 : 1975

REMARKS:
In the case where the terminals extend beyond the package, Z shall be specified as zero. Negative dimensions shall not be used.

DAE005-001 In-line package dimensions

AAG047-001 01 NR2..3.3 T01
level miNoMax real measure
deg

index datum angle $a
α

The angular spacing (in degrees) as specified by level (miNoMax) between the index feature and the first terminal true position on a terminal circle.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG048-001 01 NR2..3.3 T01
level miNoMax real measure
deg

index datum angle $a_A
α_A

The angular spacing (in degrees) as specified by level (miNoMax) between the index feature and the first terminal true position on the terminal circle with the largest diameter.

BS3934 issue 1 : 1975

AAG049-001 01 NR2..3.3 T01
level miNoMax real measure
deg

angular terminal spacing $b
β

The angular spacing (in degrees) as specified by level (miNoMax) between true positions of terminal centres on a terminal circle.

BS3934 issue 1 : 1975

DAE004-001 Cylindrical package dimensions

AAG050-001 01 NR2..3.3 T01
level miNoMax real measure
deg

angular terminal spacing $b_A
β_A

The angular spacing (in degrees) as specified by level (miNoMax) between true positions of terminal centres on the terminal circle with the largest diameter.

BS3934 issue 1 : 1975

AAG051-001 01 NR2..3.3 T01
level miNoMax real measure
deg

angular terminal spread $h
θ

The angle (in degrees) as specified by level (miNoMax) between the terminal and the seating plane.

BS3934 issue 1 : 1975

DAE012-001 Terminal splay dimensions

AAG052-001 01 NR2..3.3 T01
level miNoMax real measure
deg

terminal seating angle $h_1
θ_1

The angle (in degrees) as specified by level (miNoMax) between the terminal and the seating plane.

BS3934 issue 1 : 1975

AAG053-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal row spacing e_E
lead row spacing e_E

The distance (in m) as specified by level (miNoMax) between lines parallel to the package length and passing through the true centres of terminal positions, measured in a direction parallel to the package width.

NOTE
For surface-mount packages, this measurement refers to the centres of the lands on which the package is mounted.

AAG054-001 02 X 4 A58
simple non-quantitative code

terminal variant code terminal var

The code of the name which identifies a particular variant of the shape of the terminals on a package.

T000 = standard form
T001 = straight leads
T002 = formed leads
T003 = leads on a circle
T004 = straight leads in line
T005 = formed leads in line
T006 = leads on a square grid
T007 = offset leads
T008 = straight tags
T009 = round pins
T010 = rectangular pins
T011 = straight flat leads
T012 = solder balls
T013 = one fixed tag
T014 = two fixed tags
T015 = one lead with tag
T016 = two leads with tags
T017 = three leads with tag
T018 = one lead no tag
T019 = strip leads
T020 = multiple leads
T021 = three leads
T022 = two leads, stub and tab
T023 = straight V-section leads

IEC 60191-4 (1999)

AAG055-001 02 X 4 A57
simple non-quantitative code

body variant code body variant

The code of the name which identifies a particular variant of the shape of the body on a package.

B000 = standard form
B001 = bumped package
B002 = non-bumped package
B003 = plain cylindrical
B004 = top hat package
B005 = clamp mount package
B006 = stud mount package
B007 = cavity up
B008 = cavity down
B009 = non-cavity package (moulded)
B010 = cavity package (ceramic)

IEC 60191-4 (1999)

AAG056-001 01 A 1 A58
simple non-quantitative code

terminal position code terminal pos

A prefix to the IEC 60191-4 code which identifies the position of the terminals on the package body.

A = axial
B = bottom
D = double
E = end
L = lateral
P = perpendicular
Q = quad
R = radial
S = single
T = triple
U = upper
Z = zig-zag

IEC 60191-4 (1999)

AAG057-001 01 A 2 A58
simple non-quantitative code

package style code package style

The IEC 60191-4 code which identifies the general physical form of the package.

BD = bead
CC = chip carrier
CP = clamped
CY = cylindrical
DB = disc
FM = flange mount
FO = fibre-optic
FP = flat pack
GA = grid array
IP = in line
LF = long-form
MA = microelectronic
MP = power module
MW = microwave
PF = press-fit
PM = Post mount
RC = rectangular
SO = small outline
SS = special shape
UC = uncased chip
VP = vertical surface-mount

IEC 60191-4 (1999)

AAG058-001 01 A 1 A58
simple non-quantitative code

terminal shape code terminal shape
lead form code

A suffix to the IEC 60191-4 code which identifies the form or shape of the terminals.

NOTE
If more than one terminal is used, the code to be used shall be that for the terminal which carries the principal current.

A = screw
B = butt
C = C-bend
D = solder lug
E = faston plug
F = flat
G = gull wing
H = high current cable
I = insulated
J = J-bend
L = L-bend
N = no lead
P = pin or peg
Q = quick-connect
R = wrap-around
S = S-bend
T = through-hole
U = J-inverted
W = wire
Y = screw

IEC 60191-4 (1999)

AAG059-001 **01** **NR1..4** **Q56**
level Nom integer measure

actual quantity of termination **n_2**
actual terminal number n_2

The actual quantity of potential terminal positions which are occupied.

AAG061-001 **01** **M..32** **A58**
simple string

IEC 60191 code **IEC 60191 code**

A code used to identify the physical features of a component package which, when used with an optional suffix can provide a unique reference to a package and associated dimension set.

NOTE
The code is made up of seven fields with separators :body shape (optional)- (hyphen separator)body material (optional)terminal position (optional)package style (mandatory)- (hyphen separator)terminal shape (optional)terminal count (optional)/.

IEC 60191-4 (1999)

REMARKS:
The body material prefix may only be used if the terminal position prefix is also present. Hyphen and solidus separators are only used when the relevant prefixes and suffixes are present.

AAG062-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

package diameter **$fD_1**
$ØD_1$

A diameter (in m) as specified by level (miNoMax) of a package, excluding terminals, measured in a plane parallel to the seating plane.

BS3934 issue 1 : 1975

REMARKS:
ØD1 is usually smaller than ØD

DAE119-001 Dimensions of packages with tags

AAG063-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange length **D_1**
D_1

The length (in m) as specified by level (miNoMax) of a flange measured in the direction of the package length.

AAG064-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

mounting hole position **q_1**
q_1

The distance (in m) as specified by level (miNoMax) of the centre of a mounting hole from a reference line on the package.

AAG065-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

stand-off length **L_1**
shoulder length L_1

The length (in m) as specified by level (miNoMax) of a stand-off feature.

NOTE
This dimension applies to a separate stand-off or to the length of the wider section of shouldered terminations which have the effect of standing the component off from the seating plane.

AAG066-001 **01** **M 7** **A58**
simple string

drawing reference code **drawing ref**

Reference to the identity of the drawing on which the dimension set is based.

NOTE
The drawing reference code is made up of four fields with one separator :terminal position (one letter)package style (two letters)- (hyphen separator)terminal shape (one letter)numeric sequence code (two digits).

IEC 60191-4 (1999)

AAG067-001 **01** **M..35** **A61**
simple string

source document identification **source doc**

Reference to the identifier for the document from which a dimension set was taken.

NOTE
The document may be a manufacturer's data sheet or data book or it may be a specification such as IECQ, CECC or MIL.

AAG068-001 **01** **M..7** **A61**
simple string

source document page **source page**

The number of the page in the source document on which the dimension set is given.

AAG069-001 **01** **M..35** **A58**
simple string

manufacturer package code **manuf code**

The code by which the manufacturer identifies the package style or a specific dimension set.

NOTE
If necessary, a code may be supplemented by descriptive text to distinguish variants.

AAG070-001 **01** **M..17** **A58**
simple string

standard package code **standard code**

The code of a standard dimension set taken from a standards document.

REMARKS:
See AAG071 for identity of the standards document

AAG071-001 **01** **M..17** **A61**
simple string

standards document reference **standards ref**

The identity of a standards document that contains lists of dimension sets for electric or electronic components.

NOTE
The standard may be international, such as IEC 60191, or a corresponding national standard, such as JEDEC JESD 95, BS 3934, etc.

AAG072-001 **02** **A..3** **A58**
simple non-quantitative code

termination count sequence **count sequence**

The direction of the sequence of numbering of the terminals of a component when viewed from the top.

CW = clockwise
ACW = anti-clockwise

REMARKS:
The terminal positions should normally be numbered progressively in an anti-clockwise direction as viewed from the top. The terminal number 1 is then the first terminal position anti-clockwise from the index mark.(Ref : BS 3934-1 : 1992)

AAG073-001 **02** **A 1** **A56**
simple non-quantitative code

surface-mount flag **SMD flag**

A flag to indicate whether the package is intended for surface-mount applications.

Y = yes
N = no

AAG074-001 **01** **M 10** **A31**
simple string

date of creation of record **creation date**

The date on which the record containing the dimension set was first created in the current format.

REMARKS:
The date format shall be yyyy/mm/dd.

AAG075-001 **01** **M..35** **A41**
simple string

identification of creator creator ID

The identy of the person or organisation who was first responsible for creating the record for the dimension set in the current form.

AAG076-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal width **b_p**
lead width b_p

The width (in m) as specified by level (miNoMax) of the metallized area of the terminal pad on a surface-mount package.

NOTE
This dimension applies to that part of the terminal which is or may be used for connection to the circuit in which it is mounted.

AAG077-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **L_p**
lead length L_p

The length (in m) as specified by level (miNoMax) of the metallized area of the terminal pad on a surface-mount package.

NOTE
This dimension applies to that part of the terminal which is or may be used for connection to the circuit in which it is mounted.

AAG078-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

lid height **A_3**
A_3

The height (in m) as specified by level (miNoMax) of a lid on the top of a package which encloses a cavity below.

DAE001-001 Package length, width and height

AAG079-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

other index length **k_1**
k_1

The length (in m) as specified by level (miNoMax) of a second index feature.

NOTE
This represents the length of a feature which, when taken with other index features on the package, allows for identification of package orientation.

AAG080-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal row spacing **e_D**
lead row spacing e_D

The distance (in m) as specified by level (miNoMax) between lines parallel to the package width and passing through the true centres of terminal positions, measured in a direction parallel to the package length.

NOTE
For surface-mount packages, this measurement refers to the centres of the lands on which the package is mounted.

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AAG081-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

lid length **D_1**
D_1

The length (in m) as specified by level (miNoMax) of a lid on the top of a package which encloses a cavity below.

DAE001-001 Package length, width and height

AAG082-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

lid width **E_1**
E_1

The width (in m) as specified by level (miNoMax) of a lid on the top of a package which encloses a cavity below.

DAE001-001 Package length, width and height

AAG083-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

larger flange radius **r_1**
r_1

The larger of the two radii (in m) as specified by level (miNoMax) of a flange having an oval shape.

DAE042-001 Oval flange-mount package dimensions

AAG084-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

smaller flange radius **r_2**
r_2

The smaller of the two radii (in m) as specified by level (miNoMax) of a flange having an oval shape.

DAE042-001 Oval flange-mount package dimensions

AAG085-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange overall length **U_1**
U_1

The overall length (in m) as specified by level (miNoMax) of the mounting flange.

DAE042-001 Oval flange-mount package dimensions

AAG086-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange overall width **U_2**
U_2

The overall width (in m) as specified by level (miNoMax) of the mounting flange.

DAE042-001 Oval flange-mount package dimensions

AAG087-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal row spacing **e_A**
e_A

The distance (in m) as specified by level (miNoMax) between the centres of two parallel rows of terminals when mounted.

DAE012-001 Terminal splay dimensions

AAG088-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal row splay **e_B**
e_B

The distance (in m) as specified by level (miNoMax) between the centres of the ends of two parallel rows of terminals prior to mounting.

REMARKS:
For DIP packages, components are often supplied with the terminations splayed. For limits to the splay angle, see AXD051.

DAE012-001 Terminal splay dimensions

AAG089-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

package length **G**
G

The overall length (in m) as specified by level (miNoMax) of a package excluding terminals and slugs.

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AAG090-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

overall length **H**
H

The overall length (in m) as specified by level (miNoMax) of a package including terminals.

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AAG091-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

bent terminal spacing **e**
e

The distance (in m) as specified by level (miNoMax) between centres to which the leads of an axial-leaded package may be bent.

AAG092-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

package height zone **G_A**
G_A

The overall height (in m) as specified by level (miNoMax) of a zone which includes the package height, package irregularities and the uncontrolled part of any terminals presented in the height direction.

DAE092-002 Cylindrical stud-mount package dimensions

AAG093-002 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

stud thread diameter **%fM**
ØM

The diameter (in m) as specified by level (miNoMax) of a threaded stud used for mounting the package.

DAE092-002 Cylindrical stud-mount package dimensions

AAG094-002 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal thread diameter **%fm**
Øm

The diameter (in m) as specified by level (miNoMax) of a threaded terminal.

DAE092-002 Cylindrical stud-mount package dimensions

AAG095-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

stud length **N**
N

The length (in m) as specified by level (miNoMax) of a threaded stud used for mounting the package.

DAE092-002 Cylindrical stud-mount package dimensions

AAG096-001 **01** **M..17** **A58**
simple string

stud thread **stud thread**

The designation of the thread of a stud used for mounting the package.

AAG097-001 **01** **M..17** **A58**
simple string

terminal thread **term thread**

The designation of the thread of a terminal.

AAG098-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

main terminal length **Q_1**
Q_1

The distance (in m) as specified by level (miNoMax) of the end of the longer of two terminal leads from a reference plane.

REMARKS:
Q_1 is longer than Q_2

AAG099-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

secondary terminal length **Q_2**
Q_2

The distance (in m) as specified by level (miNoMax) of the end of the shorter of two terminal leads from a reference plane.

REMARKS:
Q_2 is shorter than Q_1.

AAG100-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

main overall length **G_1**
G_1

The longest overall length (in m) as specified by level (miNoMax) of a package measured from a reference plane excluding terminals but including slugs.

REMARKS:
G_1 is longer than G_2.

AAG101-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

secondary overall length **G_2**
G_2

`

A shorter overall length (in m) as specified by level (miNoMax) of a package measured from a reference plane excluding terminals but including slugs.

REMARKS:
G_2 is shorter than G_1.

AAG102-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

slug diameter **$fM**
ØM

The diameter (in m) as specified by level (miNoMax) of a slug.

AAG103-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

slug width **M_1**
M_1

The width (in m) as specified by level (miNoMax) of a slug.

AAG104-001 **01** **M..20** **A58**
simple string

drawing sequence code drawing ID
drawing suffix

A suffix to the drawing code which serves to identify a particular dimension set related to the drawing.

REMARKS:
The suffix is a serial numeric, separated from the drawing reference by a solidus : thus BCY-W01/24

AAG105-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

bent terminal spacing **Q**
Q

The distance (in m) as specified by level (miNoMax) between the centres of terminal leads of an axial-leaded package after the leads have been bent at right angles.

NOTE
It is assumed that the leads are bent symmetrically and equidistant from the ends of the body of the package.

AAG107-001 **01** **M..175** **A58**
simple string

terminal pattern **terminal pat**

The pattern of terminals on a grid array.

NOTE
The terminal pattern is expressed as a sequence of 1s and 0s to represent the presence or absence respectively of terminals on a regular rectangular array.

AAG108-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal reference position **S_1**
S_1

The distance (in m) as specified by level (miNoMax) from a reference line to the centre of a terminal position.

DAE042-001 Oval flange-mount package dimensions

AAG109-001 **01** **NR1..4** **Q56**
level Nom integer measure

quantity of terminal positions **n_D**
n_D

The quantity of terminal positions in a row in a direction parallel to the length.

AAG110-001 **01** **NR1..4** **Q56**
level Nom integer measure

quantity of terminal positions **n_E**
n_E

The quantity of terminal positions in a row in a direction parallel to the width.

AAG111-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal length **l**
l

The length (in m) as specified by level (miNoMax) of a terminal measured away from the body in the direction of the body length.

NOTE
The symbol l is generally used for the length of terminals which are not rigid.

AAG112-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal reference position **S_E**
S_E

The distance (in m) as specified by level (miNoMax) from a reference line to the centre of a terminal position measured in a direction parallel to the package length.

AAG113-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

terminal reference position **S_D**
S_D

The distance (in m) as specified by level (miNoMax) from a reference line to the centre of a terminal position measured in a direction parallel to the package width.

AAG114-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

flange width **E_1**
E_1

The dimension (in m) as specified by level (miNoMax) of a flange measured in the direction of the package width.

AAG115-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

index terminal length **L_1**
L_1

The length (in m) as specified by level (miNoMax) of a terminal which is longer than other terminals and is intended as an index reference

REMARKS:
An index terminal normally indicates terminal 1

AAG116-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

package diameter **$fD_2**
ØD_2

The diameter (in m) as specified by level (miNoMax) of a package, excluding terminals, measured in a plane parallel to the seating plane.

BS3934 issue 1 : 1975

REMARKS:
ØD_2 is usually smaller than ØD_1.

AAG117-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

tag hole width **t**
t

The smallest dimension (in m) as specified by level (miNoMax) of a non-circular hole in a terminal tag or slug.

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AAG118-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

tag hole diameter **$ft**
Øt

The diameter (in m) as specified by level (miNoMax) of the hole in a terminal lug or slug

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AAG119-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

tag hole diameter **$ft_1**
$Øt_1$

The diameter (in m) as specified by level (miNoMax) of the hole in a terminal lug or slug.

REMARKS:
$Øt_1$ is normally larger than $Øt_2$.

DAE119-001 Dimensions of packages with tags

AAG120-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

tag hole diameter **$ft_2**
$Øt_2$

The diameter (in m) as specified by level (miNoMax) of the hole in a terminal lug or slug.

REMARKS:
$Øt_2$ is normally smaller than $Øt_1$.

DAE119-001 Dimensions of packages with tags

AAG121-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

tag hole distance **O**
O

The distance (in m) as specified by level (miNoMax) between the seating plane and the centre of a hole in the tag of a terminal.

BS3934 issue 1 : 1975

AAG122-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

tag hole distance **O_1**
O_1

The distance (in m) as specified by level (miNoMax) between the seating plane and the centre of a hole in the tag of a terminal.

DAE119-001 Dimensions of packages with tags

AAG123-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

tag hole distance **O_2**
O_2

The distance (in m) as specified by level (miNoMax) between the seating plane and the centre of a hole in the tag of a terminal.

DAE119-001 Dimensions of packages with tags

AAG124-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

height zone **Q**
Q

The height (in m) as specified by level (miNoMax) of a zone within which a flexible lead may be bent to emerge parallel to the seating plane.

DAE119-001 Dimensions of packages with tags

AAG125-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

overall height **H_A**
H_A

The largest overall dimension (in m) as specified by level (miNoMax) in the direction of the package height which includes the package height and any terminals which are presented for mounting in the height direction.

AAG129-001 01 NR3..3.3ES2 T03
level miNoMax real measure
m

terminal length **l**
lead length l

The length (in m) as specified by level (miNoMax) of a terminal available for mounting measured from the seating plane.

NOTE
The symbol l is generally used for the length of terminals which are not rigid and not in fixed positions.

BS3934 issue 1 : 1975

AAG130-001 **01** **NR2..3.3** **T01**
level miNoMax real measure
deg

index angle **$b**
β

The angle (in degrees) as specified by level (miNoMax) of a chamfer used as an index feature.

BS3934 issue 1 : 1975

AAG131-001 **01** **NR2..3.3** **T03**
level miNoMax real measure
deg

hexagon width **H**
across-flats dimension H

The distance (in m) as specified by level (miNoMax) between parallel opposite sides of a hexagonal feature.

AAG133-001 **01** **NR3..3.3ES2** **T03**
level max real measure
m

non-threaded stud length **N_1**
N_1

The maximum length (in m) as specified by level of the non-threaded portion of a stud used for mounting the package.

DAE092-002 Cylindrical stud-mount package dimensions

AAJ001-001 **01** **M..8** **A57**
simple non-quantitative code

electrolytic capacitor type **electrolytic**

Code of the type of electrolytic capacitor.

NAL = non-solid aluminium electrolytic
NTAN = non-solid tantalum electrolytic
SAL = solid aluminium electrolytic
STAN = solid tantalum electrolytic

AAJ002-001 **01** **M..8** **A57**
simple non-quantitative code

variable capacitor type **variable**

Code of the type of variable capacitor.

PRESET = pre-set capacitor
TRIM = trimmer capacitor
TUNE = tuning capacitor

AAJ003-001 **01** **M..8** **A57**
simple non-quantitative code

single resistor type **resistor**

Code of the type of single linear resistor.

CHIP = fixed chip resistor
FUS = fixed fusing resistor
LP = fixed low-power resistor
PREC = fixed precision resistor
PWR = fixed power resistor
THERM = fixed thermostat resistor

AAJ004-001 **01** **M..8** **A57**
simple non-quantitative code

NTC thermistor type **NTC thermistor**

Code of the application type of a NTC thermistor.

CURR = current control NTC thermistor

AAJ006-002 **01** **M..8** **A57**
simple non-quantitative code

adjustability type **adjust type**

Code of the type of potentiometer according to the means by which its value is adjusted.

LPROT = low-power rotary potentiometer
PRECROT = rotary precision potentiometer
PRESET = preset potentiometer
PWRROT = power rotary potentiometer
SLIDE = slide potentiometer

AAJ007-001 **01** **A 1** **A56**
simple non-quantitative code

built-in fuse **built-in fuse**

An indication (Y or N) as to whether a solid tantalum capacitor contains a built-in fuse.

N = no built-in fuse
Y = with built-in fuse

AAJ008-001 **01** **M..8** **A58**
simple string

size code **size code**

The size code of a capacitor package intended for surface mounting.

NOTE
The code is formed from the nominal length followed by the nominal width both expressed in units of 0,1mm.

AAJ009-001 **01** **M..35** **A55**
simple string

structure **structure**

Structure of a resistor intended for high-power applications

AAJ010-001 **01** **NR3..3.3ES2** **E06**
level max real measure
V

rated voltage **V_r**
V_r

The maximum dc or ac rms voltage (in V) calculated from the square root of the product of the rated resistance and the rated dissipation which may be applied continuously to a resistor at any operating temperature below the rated temperature.

NOTE
At high values of resistance, above the critical resistance value, the rated voltage may not be applicable because of the size and the construction of the resistor.

IEC60115-1, JIS C 5201-1

AAJ011-001 **01** **NR3..3.3ES2** **E35**
level min real measure
W

fusing power **P_fuse**
P_{fuse}

The minimum power (in W) that make will ensure that a fusing resistor blows in the specified period of time.

AAJ049-001 = fusing time

EIAJ RC-2124

AAJ012-002 **01** **M..8** **A57**
simple non-quantitative code

fuse type **fuse type**

Code of the type of a fuse.

CUR = current-activated fuses
THERM = thermally-activated fuses

AAJ013-001 **01** **NR2 S..3.3** **E33**
level nom real measure
%

tolerance of TC of resistance **TC_tol**
TCR tolerance TC_{tol}

The nominal tolerance on temperature coefficient of resistance (in %) for a resistor used for temperature sensing.

IEC60115-1, JIS C 5201-1

AAJ014-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

potentiometer size **D**
D

The nominal value of the major dimension (in m) of the body of a rotary potentiometer measured in a direction perpendicular to the operating shaft.

AAJ015-001 **01** **NR3..3.3ES2** **K12**
level minMax real measure
N.m

rotation torque **T_rot**
T_{rot}

The value as specified by level (minMax) of the torque (in N.m) required to operate the shaft of a rotary potentiometer.

AAJ016-001 **01** **M..8** **A56**
simple non-quantitative code

application type **application**

Code of the application class of a resistor or potentiometer.

REMARKS:
A precision resistor is one with stable characteristics and, if a potentiometer, is capable of precise setting. A component capable of dissipating powers up to 1 W is generally regarded as being a low-power type, whilst one capable of dissipating powers of over 5 W is a high-power type. Between these values, the distinction between types depends on structure.

AAJ017-001 **01** **M..8** **A58**
simple non-quantitative code

adjustment direction **adjust dir**

Code for the direction of operation of a preset potentiometer relative to the surface on which it is mounted.

HORIZ = horizontal (side adjustment)
VERT = vertical (top adjustment)

AAJ018-001 **01** **M..8** **A56**
simple non-quantitative code

sealing class **sealing**

Code for the sealing provided to protect the slider contact area from the environment.

DUSTP = dust-proof seal
OPEN = open – no sealing
SEAL = fully sealed

AAJ019-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

slide length **l_sl**
stroke length l_{sl}

The nominal distance of travel (in m) of the moving contact actuator of a slider potentiometer.

AAJ020-001 **01** **NR3..3.3ES2** **K09**
level minMax real measure
N

slide force **F_sl**
F_{sl}

The value as specified by level (minMax) of the force (in N) required to operate the adjuster of a slider potentiometer.

AAJ021-001 **01** **NR3..3.3ES2** **K09**
level minMax real measure
N

lever stop force **F_st**
F_{st}

The value as specified by level (minMax) of the force (in N) required to over-ride the end stops of a slider potentiometer.

AAJ022-001 **01** **M..8** **A57**
simple non-quantitative code

PCB connector type **PCB connector**

Code of the type of connector intended for use with PC boards.

BTB = Board-to-board
BTC = board-to-cable
EDGE = card edge connectors
FPC = FPC/FFC
JUMP = PCB jumper

AAJ023-001 **01** **M..8** **A57**
simple non-quantitative code

contact type **contact**

Code of the type of connector contact.

CRIMP = crimped contact
ID = insulation displacement contact
SCREW = screwed contact
SOLDER = soldered contact

AAJ024-001 **01** **M..8** **A57**
simple non-quantitative code

plug/jack type **plug/jack**

Code of the type of plug or jack.

ASSY = plug assembly
CMPLX = complex jack board
CONC = concentric plug or jack
PIN = pin plug or jack
PWR = plug or jack for dc power

AAJ025-001 **01** **M..8** **A57**
simple non-quantitative code

concentric plug/jack type **concentric**

Code of the type of concentric plug or jack.

JACK = concentric jack
MULT = concentric multiple jack
PLUG = concentric plug

AAJ026-001 **01** **M..8** **A57**
simple non-quantitative code

pin plug/jack type **pin**

Code of the type of pin plug or jack.

JACK = pin jack
MULT = pin multiple jack
PLUG = pin plug
SHLD = shielded pin jack

AAJ027-001 **01** **M..8** **A57**
simple non-quantitative code

dc power plug/jack type dc power

Code of the type of plug or jack intended for use in dc power applications.

CAR = car plug
JACK = dc power jack
PLUG = dc power plug

AAJ028-001 **01** **M..8** **A57**
simple non-quantitative code

socket type **socket**

Code of the type of socket.

ANT = socket for antenna feeder
FUSE = fuse-holder or socket
IC = socket for integrated circuit
LIGHT = lighting socket
PCB = socket for PCB
PWR = power socket
SIG = signal socket
TRA = transistor socket
TUBE = socket for tube
XTAL = socket for quartz crystal

AAJ029-001 **01** **M..8** **A57**
simple non-quantitative code

tube socket type **tube socket**

Code of the type of socket intended for use with vacuum tubes.

CRT = socket for CRT
OTH = socket for tube other than CRT

AAJ030-001 **01** **M..8** **A57**
simple non-quantitative code

power socket type **power socket**

Code of the type of socket intended for use in power applications.

IN = power inlet socket
OUT = power outlet socket
XOVER = power changeover socket

AAJ031-001 **01** **M..8** **A57**
simple non-quantitative code

terminal type **terminal**

Code of the type of terminal.

ARRY = terminal array
BRD = terminal board
ROD = terminal rod
SM = small terminal

AAJ032-001 **01** **M..8** **A57**
simple non-quantitative code

small terminal type **small terminal**

Code of the type of small terminal.

GND = earth terminal
LS = speaker terminal

AAJ033-001 **01** **M..8** **A57**
simple non-quantitative code

terminal array type **terminal array**

Code of the type of terminal array.

BLOCK = block-type array
HARM = harmonica-type array

AAJ034-001 **01** **NR3..3.3ES2** **F01**
level min real measure
s

fuse pre-arcing time **t_fus**
t_{fus}
t_{arc}

The minimum time (in s) from the instant at which the fusing current is exceeded to the instant at which arcing begins.

AAE014-005 = ambient temperature

JIS C 6575

AAJ035-001 **01** **NR3..3.3ES2** **E35**
level minMax real measure
W/K

dissipation factor **P_T**
P_T

The value as specified by level (minMax) of the power (in W) required to raise the temperature of a thermistor in a state of equilibrium by 1K.

NOTE
The dissipation factor is calculated by dividing the power dissipated (in W) in the thermistor by the resulting temperature rise (in K).

JIS C 2570

AAJ036-001 **01** **M..8** **A55**
simple non-quantitative code

active element **active element**

Code for the active element in a thermally-activated fuse.

ELEM = thermal element
PELL = thermal pellet

AAJ037-001 **01** **M..8** **A55**
simple non-quantitative code

termination style **termination**

Code for the method of connecting a conductor to the contact of a connector.

A = screw
C = crimp
ID = insulation displacement
M = surface mount
P = press-in
S = solder
T = tab
W = wrap

AAJ038-001 **01** **M..8** **A55**
simple non-quantitative code

coupling style **coupling**
connecting style

Code for the method by which two parts of a connector are coupled or locked together.

BAY = bayonet
PUSH = push-pull
SCREW = screw

AAJ039-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

contact pitch **e**
e

The nominal distance (in m) between adjacent contacts in a row of a connector with contacts in a rectangular array

AAJ040-001 **01** **NR3..3.3ES2** **T03**
level minMax real measure
m

circuit board thickness **t**
card thickness t

The value as specified by level (minMax) of the thickness of the circuit board to which a connector may be attached

AAJ041-001 **01** **NR2 S..3.3** **E06**
level nom real measure
dB

voltage standing wave ratio **VSWR**
VSWR

The nominal value of the voltage standing wave ratio (in dB) of a radio-frequency connector or microwave component.

AAJ042-001 **01** **NR3..3.3ES2** **E06**
level max real measure
V

connector rated voltage **V_r**
V_r
U_r

The maximum voltage (in V) that may exist between any two contacts or between any contact and the shell or casing of a connector.

AAJ043-001 **01** **NR3..3.3ES2** **E01**
level max real measure
A

connector rated current **I_r**
I_r

The maximum total current (in A) that may be carried by a connector

AAJ044-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

connector diameter **D**
D

The value as specified by level (miNoMax) of the overall diameter of a connector with a circular or near-circular cross-section.

AAJ045-001 **01** **M..8** **A56**
simple non-quantitative code

direction of insertion **insertion dir**

Code for the direction of insertion of a jack.

HORIZ = horizontal (parallel to mounting plane)
VERT = vertical (perpendicular to mounting plane)

AAJ046-001 **01** **M..35** **A58**
simple string

package type **package**
IC package

The type of package containing one or more integrated circuits for which a socket is intended.

AAJ047-001 **01** **M..8** **A58**
simple non-quantitative code

switch type **switch type**

Code of the type of switch included with a power socket.

DPDT = double pole, double throw
DPST = double pole, single throw
NONE = no switch
SPDT = single pole, double throw
SPST = single pole, single throw

AAJ048-001 **01** **M..8** **A57**
simple non-quantitative code

fibre optic component **fibre optic**

Code of the type of fibre optic component.

ATT = fibre optic attenuator
BRA = fibre optic branch
CAB = fibre optic cable
CONN = fibre optic connector
COUP = fibre optic coupler/splicer
DET = fibre optic detetctor
FIL = fibre optic filter
ISOL = fibre optic isolator
LENS = fibre optic lens
LINK = fibre optic link
MOD = fibre optic modulator
NETW = fibre optic network
SOURC = fibre optic light source
SWI = fibre optic switch
TXRX = fibre optic transmitter/receiver
WG = optical waveguider

AAJ049-001 **01** **NR3..3.3ES2** **T07**
simple real measure
s

fusing time **@t_fuse**
@t_{fuse}

The time (in s) within which a fusing resistor should blow when a power not less than the specified fusing power is dissipated in it.

EIAJ RC-2124

AAJ051-001 **01** **M..17** **A55**
simple string

electrolyte type **electrolyte**

The physical form of the electrolyte in an electrolytic capacitor.

AAJ052-001 **01** **M..17** **A55**
simple string

anode type **anode type**

The porosity type of the anode in an electrolytic capacitor.

AAJ053-001 **01** **NR3..3.3ES2** **E06**
level minMax real measure
V

category voltage **V_c**
V_c
U_c

The value as specified by level (minMax) of the category voltage range (in V) for a capacitor.

NOTE
The category voltage represents the range of permissible operating voltages at all temperatures within the category temperature range.

AAJ054-001 **01** **NR3..3.3ES2** **E06**
level minMax real measure
V

surge voltage **V_surge**
V_{surge}
U_{surge}

The value as specified by level (minMax) of the surge voltage range (in V) for a capacitor.

AAJ055-001 **01** **NR3..3.3ES2** **H02**
level minMax real measure
Cel

rated temperature **T_r**
T_r

The value as specified by level (minMax) of the rated temperature range (in Cel) for a capacitor.

AAJ056-001 **01** **NR3..3.3ES2** **H02**
level minMax real measure
Cel

category temperature **T_c**
T_c

The value as specified by level (minMax) of the category temperature range (in Cel) for a component.

NOTE
The category temperature range is that range of ambient temperatures over which the component may be operated continuously.

AAJ057-001 **01** **NR3 S..3.3ES2** **E09**
level miNoMax real measure
%

capacitance change with temperature $DC/C
ΔC/C

The value as specified by level (miNoMax) of the variation of capacitance (in %) with temperature over a specified temperature range (T_1 to T_2).

AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAJ058-001 **01** **NR3..3.3ES2** **E44**
level miNoMax real measure
Ω

impedance of a capacitor **Z**
Z

The value as specified by level (miNoMax) of the modulus of the impedance (in ohms) of a capacitor at a specified frequency.

AAE029-005 = frequency

AAJ059-001 **01** **M..8** **A57**
simple non-quantitative code

filter type **filter type**

Code of the type of filter.

ACT = active filter
DIEL = dielectric filter
LCR = LCR filter
MECH = mechanical filter
PIEZO = piezo-electric ceramic filter
SAW = surface-acoustic-wave filter
TRAP = trap
XTL = quartz-crystal filter

AAJ060-001 **01** **NR2..3.3** **E06**
level nom real measure
V

rated voltage **V_r**
V_r
U_r

The value of the nominal voltage (in V) applied across the terminals of a PTC thermistor at which the device is intended to operate.

AAJ061-001 **01** **NR2..3.3** **E06**
level max real measure
V

maximum operating voltage **V_max**
V_{max}
U_{max}

The value of the maximum voltage (in V) that may be appled across the terminals of a PTC thermistor.

AAJ062-001 **01** **NR3..3.3ES2** **E01**
level max real measure
A

maximum current **I_max**
I_{max}

The value of the maximum current (in A) that may be passed through a PTC thermistor at its rated voltage.

AAJ063-001 **01** **NR3..3.3ES2** **E49**
level nom real measure
W

power consumption **P_l**
P_l

The value of the maximum power that may be dissipated in a PTC thermistor at ambient temperature and with rated voltage applied.

AAE014-005 = ambient temperature

AAJ064-001 **01** **NR1..4** **Q56**
level nom integer measure
1

number of poles **n_p**
n_p

The number of electrically separate conductive paths that are controlled by a switch.

AAJ065-001 **01** **NR3..3.3ES2** **T03**
level nom real measure
m

travel **e_tr**
e_{tr}

The nominal distance (in m) between adjacent positions of a switch with rectilinear operation.

AAJ066-001 **01** **NR2..3.3** **T01**
level nom real measure
deg

angular travel **$a_tr**
$alpha;_{tr}$

The nominal angular distance (in deg) between adjacent positions of a switch with rotary operation

AAJ067-001 **01** **NR2..3.3** **A59**
level miNoMax real measure
1

operating life **n_cyc**
n_{cyc}

The minimum number of operating cycles for which a switch is designed to undergo during its life.

AAJ068-001 **01** **M..35** **A58**
simple string

shaft style **shaft style**

The style of the operating shaft of a switch with rotary action.

AAJ069-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

shaft length **L_shaft**
L_{shaft}

The value as specified by level (miNoMax) of the length (in m) of the shaft of a switch having rotary action measured from the tip of the shaft to the mounting surface.

AAJ070-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure
m

shaft diameter **d_shaft**
d_{shaft}

The value as specified by level (miNoMax) of the diameter (in m) of the shaft of a switch having rotary action.

AAJ071-001 **01** **M..70** **A55**
simple string

additional features **add features**

Description of features that are incorporated in a switch in addition to the switching action

REMARKS:
Additional features may include such items as indicator lamps, locking mechanisms, earthing terminal etc.

AAJ072-001 **01** **M..70** **A55**
simple string

sealing **sealing**

Description of the method of sealing of a switch.

AAJ073-001 **01** **NR2..3.3** **F02**
level nom real measure
s

thermal time-constant (power) **$t_P**
τ_P

The nominal time (in s) for the temperature of a thermistor element to change by 63,2 % of the difference between its initial and final temperatures following an abrupt change in the power dissipated at constant ambient temperature.

AAJ074-001 **01** **M..8** **A57**
simple non-quantitative code

image pickup device type **image pickup ty**

Code of the type of an image pickup device.

CCDA = CCD area array sensor
CCDL = CCD linear array sensor
MOS = MOS sensor

AAJ075-001 **01** **M..8** **A57**
simple non-quantitative code

signal transformer type **signal transfor**

Code of the type of a signal transformer.

HYB = hybrid
LF = low-frequency
PUL = pulse
RF = radio frequency
ROT = rotary
WB = wide-band

AAJ076-001 **01** **NR2..3.3** **E22**
level nom real measure
%

inductance tolerance (%) **L_tol%**
$L_{tol\%}$

The nominal tolerance (in %) of the value of inductance of an inductor.

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAJ077-001 **01** **NR2..3.3** **E22**
level nom real measure
%

inductance tolerance **L_tol**
L_{tol}

The nominal tolerance (in H) of the value of inductance of an inductor.

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAJ078-001 **01** **M..8** **A57**
simple non-quantitative code

variable inductor type **variable induct**

Code of the type of a variable inductor.

ANT = antenna inductor
LF = low-frequency
RF = radio frequency

AAJ079-001 **01** **NR3..3.3ES2** **E22**
level miNoMax real measure
H

minimum inductance **L_min**
L_{min}

The value as specified by level (miNoMax) of the minimum value of the range of values of inductance (in H) of a variable inductor at specified frequency.

AAE029-005 = frequency

AAJ080-001 **01** **NR3..3.3ES2** **E22**
level miNoMax real measure
H

maximum inductance **L_max**
L_{max}

The value as specified by level (miNoMax) of the maximum value of the range of values of inductance (in H) of a variable inductor at specified frequency.

AAE029-005 = frequency

AAJ081-001 **01** **M..8** **A57**
simple non-quantitative code

spark gap type **spark gap type**

Code of the type of spark gap.

AIR = air spark gap
GAS = gas-filled spark gap

AAJ082-001 **01** **NR2..3.3** **E06**
level nom real measure
V

dc breakdown voltage **V_BR**
V_{BR}
U_{BR}

The nominal value of the voltage (in V) at which a discharge occurs between the electrodes of a spark gap as the voltage is gradually increased.

NOTE
The dc breakdown voltage is measured with a rate of voltage increase between 100 V/s and 500 V/s

AAJ083-001 **01** **NR2..3.3** **E06**
level nom real measure
V

breakdown voltage tolerance **V_BR(tol)**
$V_{BR(tol)}$
$U_{BR(tol)}$

The nominal value of the tolerance (in V) of the dc breakdown voltage of a spark gap.

REMARKS:
Used only in cases of equal positive and negative tolerance values.

AAJ084-001 **01** **NR3..3.3ES2** **E09**
level max real measure
F

capacitance **C_gap**
C_{gap}

The maximum value of the capacitance (in F) between the electrodes of a spark gap at specified frequency and temperature.

AAE029-005 = frequency
AAE685-005 = temperature

AAJ085-001 **01** **NR2..3.3** **E06**
level max real measure
V

withstanding voltage **V_with**
V_{with}
U_{with}

The maximum value of the ac voltage that may be applied across the electrodes of a gas-filled spark gap without causing breakdown.

AAJ086-001 **01** **NR2..3.3** **E01**
level max real measure
A

surge current **I_surge**
I_{surge}

The maximum value of the pulse current (in A) which can be passed through a gas-filled spark gap.

REMARKS:
Test measurements are made with pulse waveforms of 8 µs to 20 µs.

AAJ087-001 **01** **NR3..3.3ES2** **E33**
level min real measure
Ω

insulation resistance **R_ins**
R_{ins}

The minimum resistance (in ohms) between one terminal or several terminals connected together and the case or enclosure of a component at specified voltage.

AAJ088-001 **01** **M..8** **A57**
simple non-quantitative code

resonator type **resonator type**

Code of the type of resonator.

CAV = cavity resonator
DIEL = dielectric resonator
LCR = LC/CR resonator
MECH = mechanical resonator
MR = magnetostrictive resonator
PIEZO = piezo-electric ceramic resonator
SAW = surface-acoustic-wave resonator
XTL = quartz-crystal resonator

AAJ089-001 **01** **NR3..3.3ES2** **F03**
level nom real measure
Hz

resonant frequency **f_0**
f_0

The nominal frequency (in Hz) at which a resonator produces its maximum response.

AAJ090-001 **01** **NR3..3.3ES2** **E46**
level miNoMax real measure
1

quality factor **Q**
Q-factor Q

The value as specified by level (miNoMax) of the quality factor of a resonator at a specified frequency.

AAE029-005 = frequency

AAJ091-001 **01** **NR3..3.3ES2** **T07**
level max real measure
s

access time from address **t_AA**
t_{AA}

The maximum time interval (in s) between the application of the address input, other necessary inputs being already present, and the availability of valid data signals at an output of a DRAM.

AAJ092-001 **01** **NR3..3.3ES2** **T07**
level max real measure
s

access time from clock **t_AC**
t_{AC}

The maximum time interval (in s) between the application of the clock pulse, other necessary inputs being already present, and the availability of valid data signals at an output of a DRAM.

AAJ093-001 **01** **NR3..3.3ES2** **T07**
level min real measure
s

burst-mode cycle time **t_CK**
t_{CK}

The minimum time interval (in s) that must elapse between successive read/write operations for a DRAM operating in burst mode.

AAJ094-001 **01** **NR3..3.3ES2** **T07**
level min real measure
s

random read/write cycle time **t_RC**
t_{RC}

The minimum time interval (in s) that must elapse between successive random read/write operations for a DRAM.

AAJ095-001 **01** **NR3..3.3ES2** **T07**
level max real measure
s

access time from RAS **t_RAC**
t_{RAC}

The maximum time interval (in s) between the application of the RAS Row Address Strobe) input pulse, other necessary inputs being already present, and the availability of valid data signals at an output of a DRAM.

AAJ096-001 **01** **NR3..3.3ES2** **T07**
level max real measure
Hz

clock frequency **f_CK**
f_{CK}

The maximum time frequency (in Hz) of the clock signal applied to a DRAM.

AAJ098-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

address set-up time **t_AS**
t_{AS}

The minimum time interval (in s) between application of a signal that is maintained at the address input terminal and a subsequent active transition of the corresponding timing pulse of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF212.

AAJ099-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

address hold time **t_AH**
t_{AH}

The minimum time interval (in s) during which the address signal must be retained at an input terminal after the subsequent active transition of the corresponding timing signal of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF213.

AAJ100-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

input set-up time **t_IS**
t_{IS}

The minimum time interval (in s) between application of a signal that is maintained at an input terminal and a subsequent active transition of the corresponding timing pulse of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF212.

AAJ101-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

input hold time **t_IH**
t_{IH}

The minimum time interval (in s) during which a signal must be retained at an input terminal after the subsequent active transition of the corresponding timing signal of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF213.

AAJ102-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

clock set-up time **t_CKS**
t_{CKS}

The minimum time interval (in s) between application of the clock signal that is maintained at an input terminal and a subsequent active transition of the corresponding timing pulse of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF212.

AAJ103-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

clock hold time **t_CKH**
t_{CKH}

The minimum time interval (in s) during which the clock signal must be retained at an input terminal after the subsequent active transition of the corresponding timing signal of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF213.

AAJ104-001 **01** **NR3 S..3.3ES2** **T07**
level min real measure
s

output hold time **t_OH**
t_{OH}

The minimum time interval (in s) during which a signal is retained at an output terminal after the subsequent active transition of the corresponding timing signal of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

REMARKS:
For further information, refer to AAF213.

AAJ105-001 **01** **NR3..3.3ES2** **T07**
level minMax real measure
s

transition time **t_T**
t_T

The limits to the value as specified by level (minMax) of the HIGH-to-LOW or LOW-to-HIGH level transition time (in s) which must be observed at the clock input of a memory device at specified supply voltage and in a temperature range between specified temperatures (T_1 and T_2).

NOTE
The LOW voltage level is specified as VIL and the HIGH level as VIH.

AAE102-005 = supply voltage
AAE958-005 = temperature T_1
AAE959-005 = temperature T_2

AAJ106-001 **01** **M..8** **A57**
simple non-quantitative code

dielectric material **dielectric**
dielectric
insulator

Code for the type of a dielectric material.

CER = ceramic
CLO = cloth
GLA = glass
MIC = mica
PAP = paper
RUB = rubber
WOO = wood

AAJ107-001 **01** **M..8** **A57**
simple non-quantitative code

printed wiring base material **PW base**
printed wiring base
PW base

Code for the type of base material used in a printed wiring laminate.

GCN = glass cloth, non-woven core
GCP = glass cloth, paper core
GLF = glass fabric
GMP = glass mod-and-un polyimide
GTE = glass ismal/triaz/epox
PER = paper base, epoxy resin
PPR = paper base, phenolic resin
SFF = synthetic fibre fabric

AAJ108-001 **01** **NR3..3.3ES2** **T03**
level nom real measure

copper thickness **t_Cu**
Cu thickness t_{Cu}

The nominal thickness (in m) of the copper cladding on a printed-wiring laminate.

AAJ109-001 **01** **NR1..2** **Q56**
level nom integer measure

number of layers **n_lay**
n_{lay}

The number of layers in a multilayer printed-wiring circuit.

AAJ110-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure

circuit length **D**
board length D

The length (in m) of a printed wiring circuit as given by level (miNoMax).

AAJ111-001 **01** **NR3..3.3ES2** **T03**
level miNoMax real measure

circuit width **E**
board width E

The width (in m) of a printed wiring circuit as given by level (miNoMax).

AAJ112-001 **01** **NR3..3.3ES2** **T03**
level min real measure

track width **d_w**
d_w

The minimum width (in m) of a conductive track on a printed wiring circuit.

AAJ113-001 **01** **NR3..3.3ES2** **T03**
level min real measure

track spacing **d_s**
d_s

The minimum spacing (in m) between adjacent conductive tracks on a printed wiring circuit.

AAJ114-001 **01** **M..35** **A57**
simple string

connector material **con finish**
connector finish

The material used to coat or finish the conducting strips forming connections at the edge of a printed wiring circuit.

AAJ115-001 **01** **NR3..3.3ES2** **T03**
level nom real measure

connector pitch **e**
e

The nominal distance (in m) between the centres of adjacent conducting strips forming connections at the edge of a printed wiring circuit.

AAJ116-001 **01** **M..8** **A55**
simple non-quantitative code

printed circuit type **PW type**
printed board type
PC board type

Code for the type of printed wiring circuit or board.

BUP = build-up
CER = ceramic-based
DFR = double-sided flex-rigid
MET = metal-based
MFR = multi-layer flex-rigid
MLF = multi-layer flexible
MLR = multi-layer rigid
SDF = single- or double-sided flexible
SDR = single- or double-sided rigid

AAJ117-001 **01** **M..8** **A55**
simple non-quantitative code

microwave component type **microwave type**

Code for the type of microwave component.

ATT = attenuator
CIRC = circulator
COAX = coaxial guide
COUP = coupler
DET = detector
DIR = directional coupler
DIV = divider/combiner
ISO = isolator
MIX = mixer
PS = phase shifter
RES = resonator
SWI = switch
TERM = terminator
WAV = waveguide

AAJ118-001 **01** **M..8** **A55**
simple non-quantitative code

connection type **connect type**

Code for the type of connection for a microwave component.

CONN = connector
PIN = pin
SL = strip-line
SM = surface-mount
WAV = waveguide

AAJ119-001 **01** **NR1 S..4** **E49**
level miNoMax integer measure
dB

insertion loss **insertion loss**
insertion loss

The value as specified by level (miNoMax) of the insertion loss (in dB) of a microwave component.

AAJ120-001 **01** **NR1 S..4** **E49**
level miNoMax integer measure
dB

isolation **isolation**
isolation

The value as specified by level (miNoMax) of the attenuation (in dB) provided in a direction opposite to that of the normal signal flow of a microwave component.

AAJ121-001 **01** **NR3..3.3ES2** **E35**
level max real measure
W

maximum power handling **P_max**
maximum power P_{max}

The maximum value of the power (in W) which may be handled or transmitted by a microwave component.

AAJ122-001 **01** **NR3..3.3ES2** **F03**
level minMax real measure
Hz

frequency range **f_range**
frequency band f_{range}

The value as specified by level (minMax) of the frequencies (in Hz) over which a microwave component is designed to operate.

AAJ123-001 **01** **M..8** **A55**
simple non-quantitative code

potentiometer type **POT type**

Code for the type of potentiometer.

MULT = multi-turn rotary
SING = single-turn rotary

AAJ124-001 **01** **NR2..3.3** **Q56**
level nom real measure
1

number of turns **n_turn**
n_{turn}

The nominal value of the number of turns required to cover the full electrical range of a multi-turn rotary potentiometer.

Annex D
(normative)

Drawings

D.1 Drawing definitions

The following table lists the drawings which are contained within this annex.

DAA001-001 01

ABD-W-T001

Bead package, straight axial wire leads

DXF	DAA001.DXF
JPEG	DAA001.JPG
Windows Meta-File	DAA001.WMF

DAA02-001 01

BBD-W-T001

Bead package, straight bottom wire leads

DXF	DAA002.DXF
JPEG	DAA002.JPG
Windows Meta-File	DAA002.WMF

DAA003-001 01

BBD-W-T002

Bead package, formed bottom wire leads

DXF	DAA003.DXF
JPEG	DAA003.JPG
Windows Meta-File	DAA003.WMF

DAA004-001 01

BCY-W-T003

Cylindrical package, bottom leads on circle

DXF	DAA004.DXF
JPEG	DAA004.JPG
Windows Meta-File	DAA004.WMF

DAA005-001 01

BCY-W-T004

Cylindrical package, straight in-line bottom leads

DXF	DAA005.DXF
JPEG	DAA005.JPG
Windows Meta-File	DAA005.WMF

DAA06-001 01

BCY-W-T005

Cylindrical package, formed in-line bottom leads

DXF	DAA006.DXF
JPEG	DAA006.JPG
Windows Meta-File	DAA006.WMF

DAA07-001 01

BCY-W-T006

Cylindrical package, bottom leads on square grid

DXF	DAA007.DXF
JPEG	DAA007.JPG
Windows Meta-File	DAA007.WMF

DAA008-001 01

BCY-W-T007

Cylindrical package, offset in-line bottom leads

DXF	DAA008.DXF
JPEG	DAA008.JPG
Windows Meta-File	DAA008.WMF

DAA009-001 01

ECY-R-T000

Cylindrical package, wrap-around terminals

DXF	DAA009.DXF
JPEG	DAA009.JPG
Windows Meta-File	DAA009.WMF

DAA010-001 01

RCY-D-T001

Cylindrical package, straight radial tag leads

DXF	DAA010.DXF
JPEG	DAA010.JPG
Windows Meta-File	DAA010.WMF

DAA011-001 01

RCY-W-T001

Cylindrical package, straight radial wire leads

DXF	DAA011.DXF
JPEG	DAA011.JPG
Windows Meta-File	DAA011.WMF

DAA012-001 01

ADB-W-T001

Disc package, straight axial wire leads

DXF	DAA012.DXF
JPEG	DAA012.JPG
Windows Meta-File	DAA012.WMF

DAA013-001 01

BDB-W-T001

Disc package, straight bottom wire leads

DXF	DAA013.DXF
JPEG	DAA013.JPG
Windows Meta-File	DAA013.WMF

DAA014-001 01

BDB-W-T002

Disc package, formed bottom wire leads

DXF	DAA014.DXF
JPEG	DAA014.JPG
Windows Meta-File	DAA014.WMF

DAA015-001 01

BFM-P-T007

Oval flange-mount package, offset bottom pins

DXF	DAA015.DXF
JPEG	DAA015.JPG
Windows Meta-File	DAA015.WMF

DAA016-001 01

BFM-P-T003

Oval flange-mount package, bottom pins on circle

DXF	DAA016.DXF
JPEG	DAA016.JPG
Windows Meta-File	DAA016.WMF

DAA017-001 01

DFM-P-T009

Flange-mount package, dual-in-line pins

DXF	DAA017.DXF
JPEG	DAA017.JPG
Windows Meta-File	DAA017.WMF

DAA018-001 01

SFM-T-T011

Flange-mount package, single row, straight flat leads

DXF	DAA018.DXF
JPEG	DAA018.JPG
Windows Meta-File	DAA018.WMF

DAA019-001 01

SFM-T-T023

Flange-mount package, single row, straight V-section leads

DXF	DAA019.DXF
JPEG	DAA019.JPG
Windows Meta-File	DAA019.WMF

DAA020-001 01

DFP-F-T001

Dual flat pack, straight flat leads

DXF	DAA020.DXF
JPEG	DAA020.JPG
Windows Meta-File	DAA020.WMF

DAA021-001 01

BGA-B-T012

Ball-grid array package, bottom terminals

DXF	DAA021.DXF
JPEG	DAA021.JPG
Windows Meta-File	DAA021.WMF

DAA022-001 01

DIP-P-T009

Dual-in-line package, round pins

DXF	DAA022.DXF
JPEG	DAA022.JPG
Windows Meta-File	DAA022.WMF

DAA023-001 01

DIP-P-T010

Dual-in-line package, rectangular pins

DXF	DAA023.DXF
JPEG	DAA023.JPG
Windows Meta-File	DAA023.WMF

DAA024-001 01

DIP-T-T000

Dual-in-line package, standard through-hole leads

DXF	DAA024.DXF
JPEG	DAA024.JPG
Windows Meta-File	DAA024.WMF

DAA025-002 01

UPM-D-T013

Stud-mount package, one fixed tag

DXF	DAA025.DXF
JPEG	DAA025.JPG
Windows Meta-File	DAA025.WMF

DAA026-002 01

UPM-D-T014

Stud-mount package, two fixed tags

DXF	DAA026.DXF
JPEG	DAA026.JPG
Windows Meta-File	DAA026.WMF

DAA027-002 01

UPM-H-T015

Stud-mount package, one flexible lead with tag

DXF	DAA027.DXF
JPEG	DAA027.JPG
Windows Meta-File	DAA027.WMF

DAA028-002 01

UPM-H-T016

Stud-mount package, two flexible leads with tags

DXF	DAA028.DXF
JPEG	DAA028.JPG
Windows Meta-File	DAA028.WMF

DAA029-002 01

UPM-H-T017

Stud-mount package, three flexible leads with tags

DXF	DAA029.DXF
JPEG	DAA029.JPG
Windows Meta-File	DAA029.WMF

DAA030-002 01

UPM-H-T018

Stud-mount package, one flexible lead, no tag

DXF	DAA030.DXF
JPEG	DAA030.JPG
Windows Meta-File	DAA030.WMF

DAA031-001 01

ARC-D-T019

Rectangular package, axial strip leads

DXF	DAA031.DXF
JPEG	DAA031.JPG
Windows Meta-File	DAA031.WMF

DAA032-001 01

ARC-W-T007

Rectangular package, offset axial wire leads

DXF	DAA032.DXF
JPEG	DAA032.JPG
Windows Meta-File	DAA032.WMF

DAA033-001 01

BRC-W-T001

Rectangular package, straight bottom wire leads

DXF	DAA033.DXF
JPEG	DAA033.JPG
Windows Meta-File	DAA033.WMF

DAA034-001 01

BRC-W-T002

Rectangular package, formed bottom wire leads

DXF	DAA034.DXF
JPEG	DAA034.JPG
Windows Meta-File	DAA034.WMF

DAA035-001 01

ERC-M-T000

Rectangular package, metallised ends

DXF	DAA035.DXF
JPEG	DAA035.JPG
Windows Meta-File	DAA035.WMF

DAA036-001 01

ERC-R-T000

Rectangular package, wrap-around terminals

DXF	DAA036.DXF
JPEG	DAA036.JPG
Windows Meta-File	DAA036.WMF

DAA037-001 01

DSO-G-T020

Dual small-outline package, multiple gull-wing leads

DXF	DAA037.DXF
JPEG	DAA037.JPG
Windows Meta-File	DAA037.WMF

DAA038-001 01

DSO-G-T021

Small-outline package, three gull-wing leads

DXF	DAA038.DXF
JPEG	DAA038.JPG
Windows Meta-File	DAA038.WMF

DAA039-001 01

SSO-G-T022

Small-outline package, two gull-wing leads, stub and tab

DXF	DAA039.DXF
JPEG	DAA039.JPG
Windows Meta-File	DAA039.WMF

DAA040-001 01

QCC-J-T000-B002

Quad chip carrier, J-bend leads, non-bumped package

DXF	DAA040.DXF
JPEG	DAA040.JPG
Windows Meta-File	DAA040.WMF

DAA041-001 01

QCC-N-T000-B009

Quad chip carrier, leadless non-cavity package (moulded)

DXF	DAA041.DXF
JPEG	DAA041.JPG
Windows Meta-File	DAA041.WMF

DAA042-001 01

QCC-N-T000-B010

Quad chip carrier, leadless cavity package (ceramic)

DXF	DAA042.DXF
JPEG	DAA042.JPG
Windows Meta-File	DAA042.WMF

DAA043-001 01

ACY-W-T001-B003

Cylindrical package, straight axial wire leads

DXF	DAA043.DXF
JPEG	DAA043.JPG
Windows Meta-File	DAA043.WMF

DAA044-001 01

ACY-W-T001-B004

Top-hat package, straight axial wire leads

DXF	DAA044.DXF
JPEG	DAA044.JPG
Windows Meta-File	DAA044.WMF

DAA045-001 01

UCY-D-T000-B005

Cylindrical package, top tag terminals, clamp mount

DXF	DAA045.DXF
JPEG	DAA045.JPG
Windows Meta-File	DAA045.WMF

DAA046-002 01

UCY-D-T000-B006

Cylindrical package, top tag terminals, stud mount

DXF	DAA046.DXF
JPEG	DAA046.JPG
Windows Meta-File	DAA046.WMF

DAA047-001 01

UCY-Y-T000-B005

Cylindrical package, top screw terminals, clamp mount

DXF	DAA047.DXF
JPEG	DAA047.JPG
Windows Meta-File	DAA047.WMF

DAA048-002 01

UCY-Y-T000-B006

Cylindrical package, top screw terminals, stud mount

DXF	DAA048.DXF
JPEG	DAA048.JPG
Windows Meta-File	DAA048.WMF

DAA049-001 01

QFP-G-T000-B002

Quad flat pack, gull-wing leads, non-bumped package

DXF	DAA049.DXF
JPEG	DAA049.JPG
Windows Meta-File	DAA049.WMF

DAA050-001 01

PGA-P-T009-B007

Pin-grid array package, cavity up

DXF	DAA050.DXF
JPEG	DAA050.JPG
Windows Meta-File	DAA050.WMF

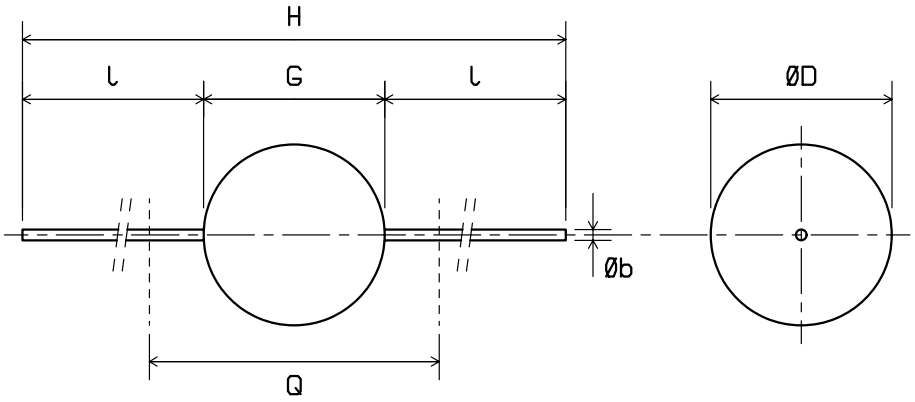
DAA051-001 01

PGA-P-T009-B008

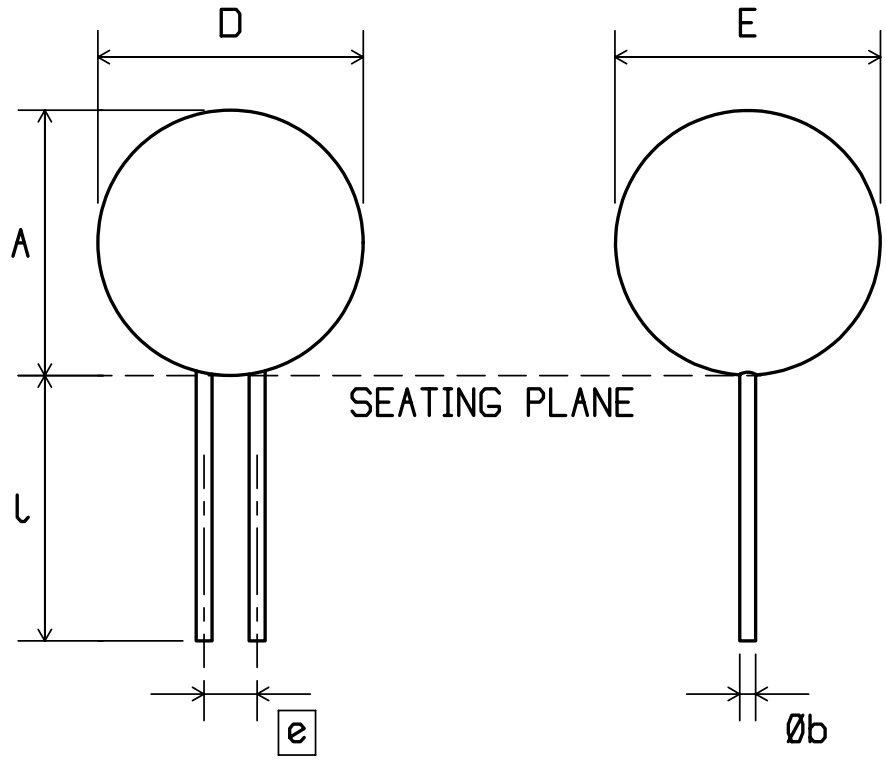
Pin-grid array package, cavity down

DXF	DAA051.DXF
JPEG	DAA051.JPG
Windows Meta-File	DAA051.WMF

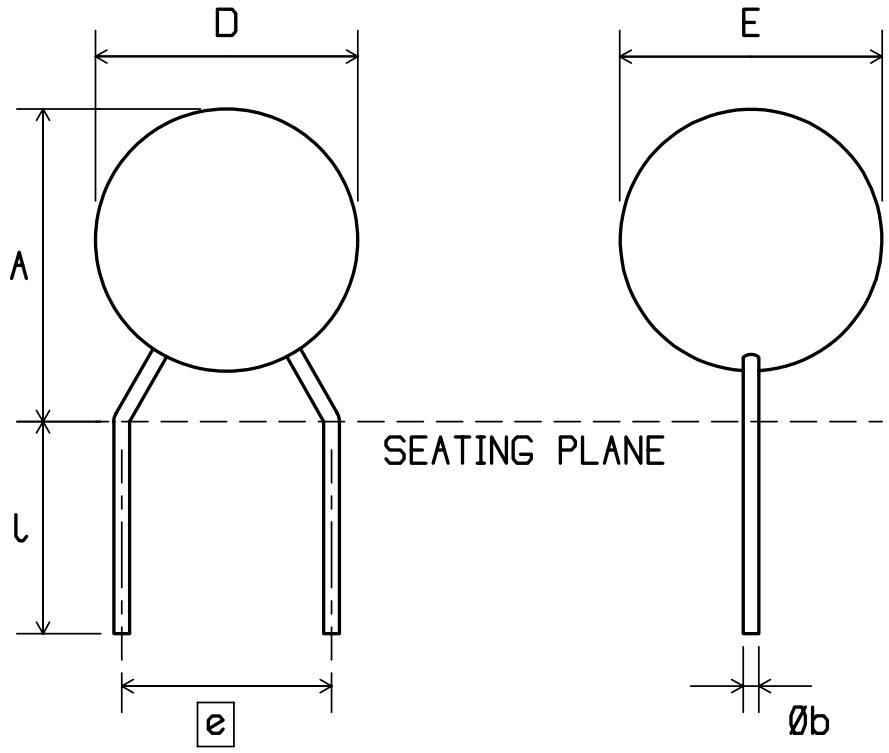
D.2 Drawings



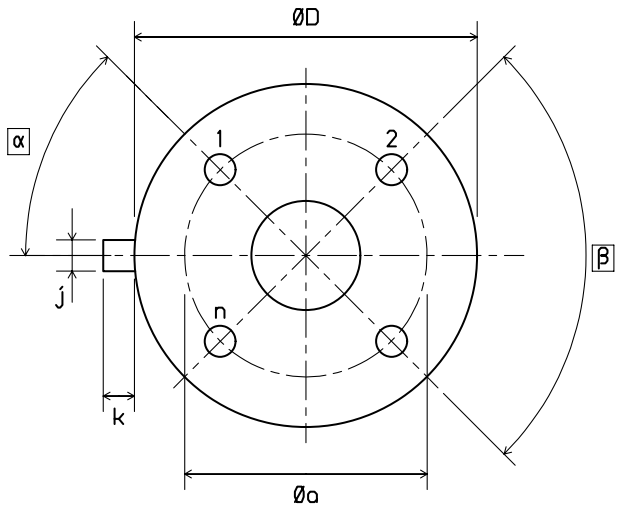
Bead package, straight axial wire leads	**DAA001** ABD-W-T001
First-angle projection	Version 001, revision 01

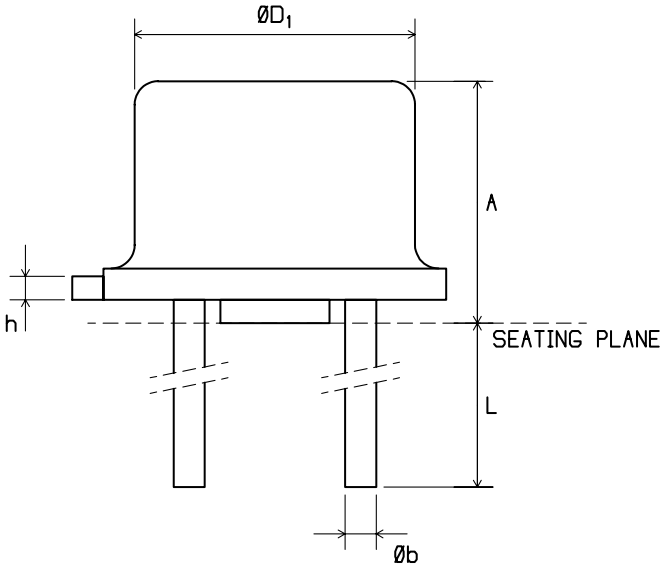


Bead package, straight bottom wire leads	**DAA002** BBD-W-T001
First-angle projection	Version 001, revision 01

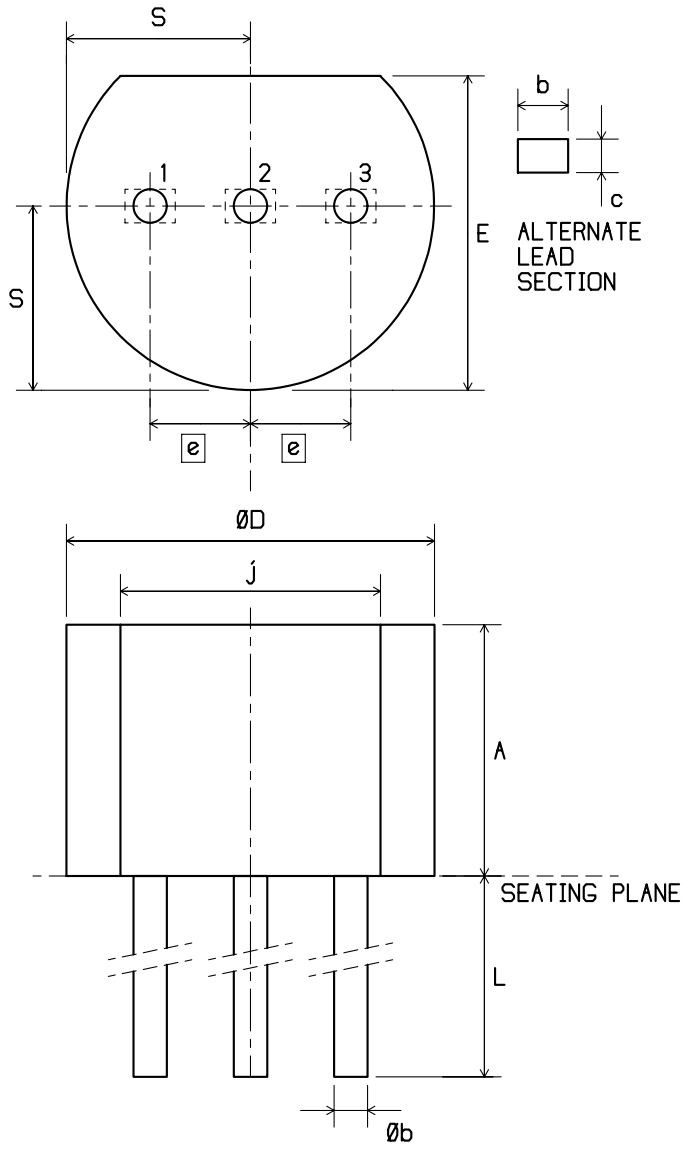


Bead package, formed bottom wire leads	**DAA003** BBD-W-T002
First-angle projection	Version 001, revision 01

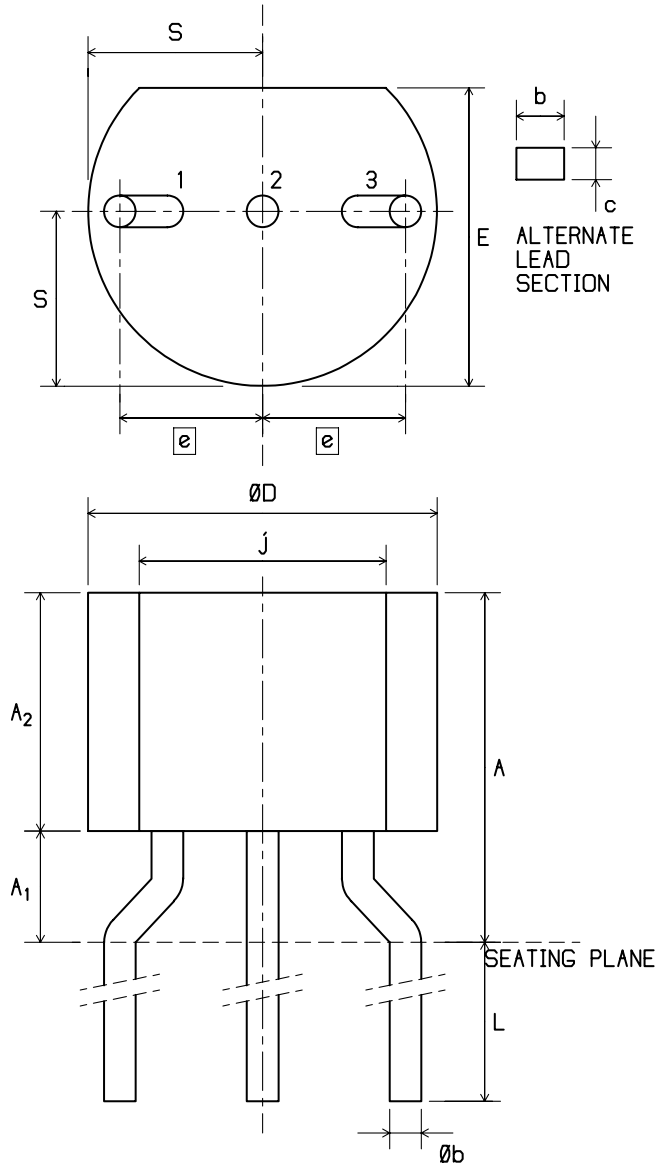




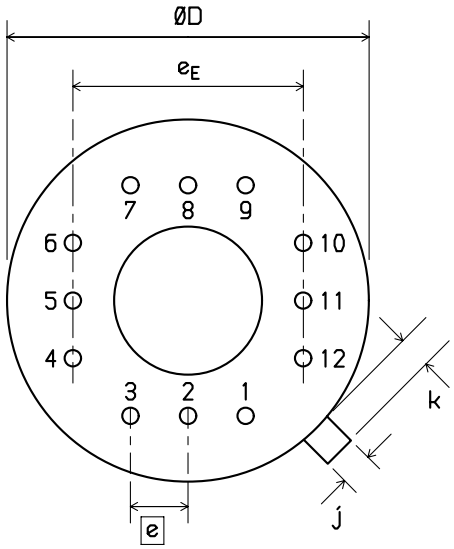
Cylindrical package, bottom leads on circle	**DAA004** BCY-W-T003
First-angle projection	Version 001, revision 01

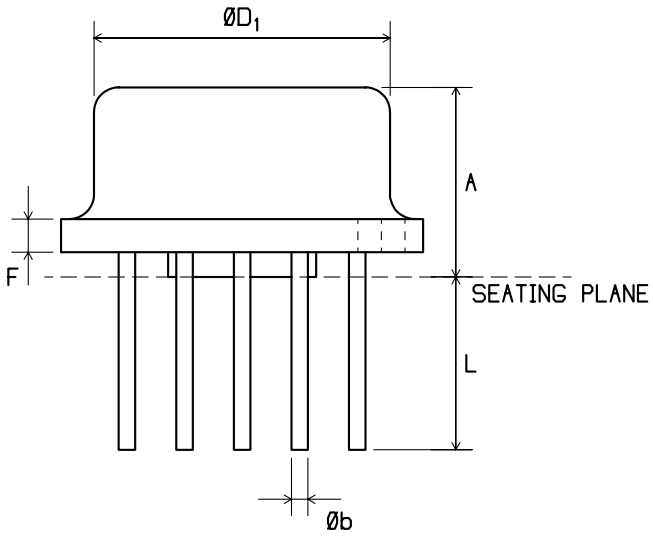


Cylindrical package, straight in-line bottom leads	**DAA005** BCY-W-T004
First-angle projection	Version 001, revision 01

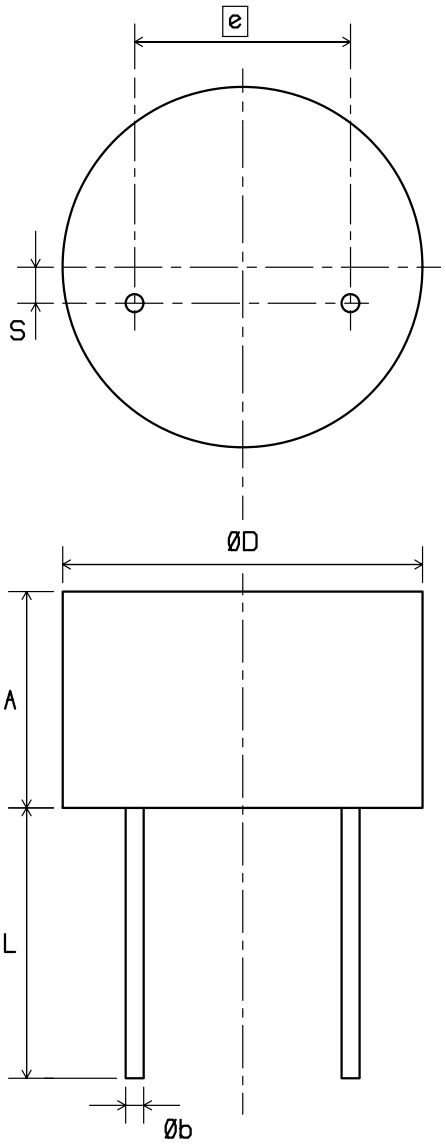


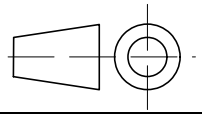
Cylindrical package, formed in-line bottom leads	**DAA006** BCY-W-T005
First-angle projection	Version 001, revision 01

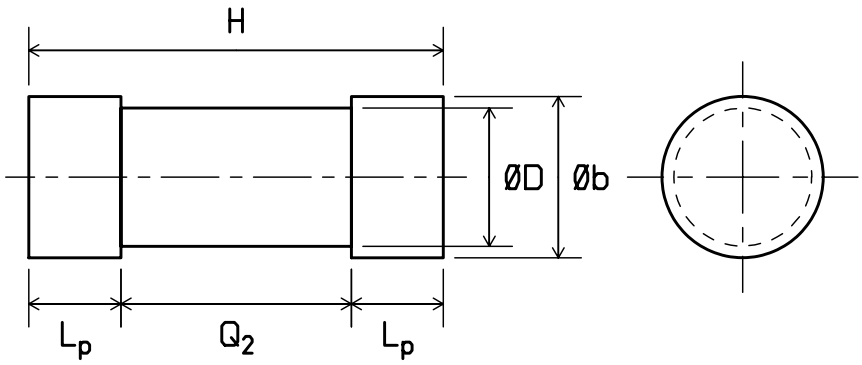


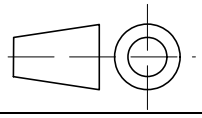


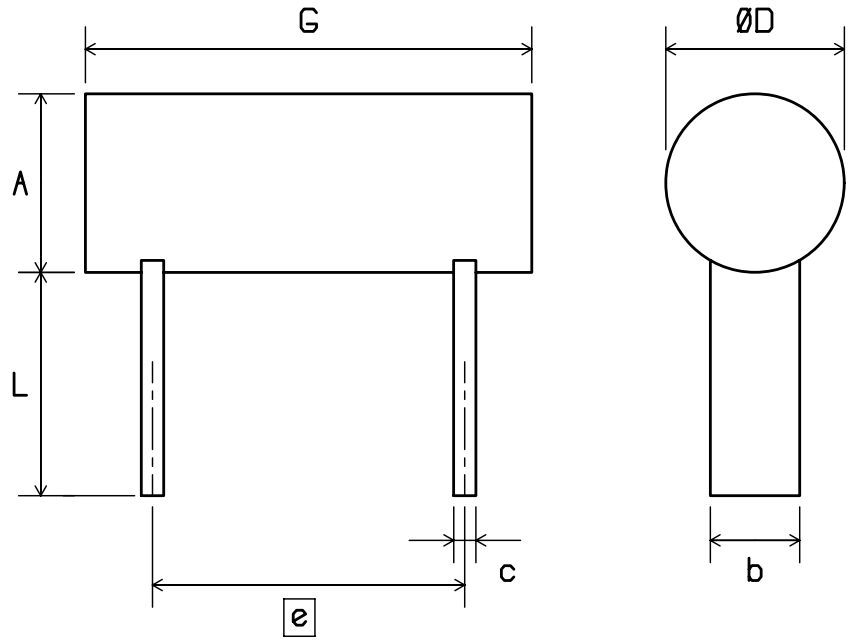
Cylindrical package, bottom leads on square grid	**DAA007** BCY-W-T006
First-angle projection	Version 001, revision 01



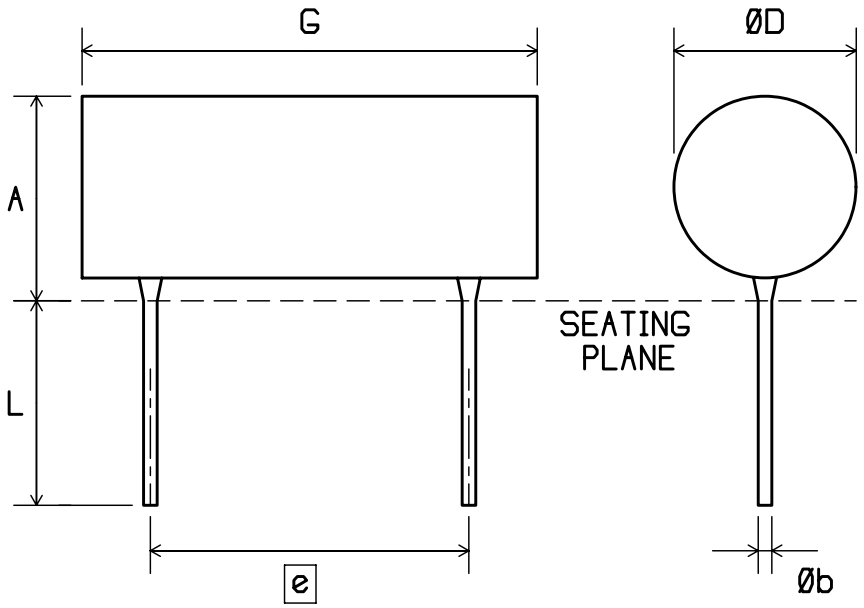
Cylindrical package, offset in-line bottom leads	**DAA008** BCY-W-T007
First-angle projection 	Version 001, revision 01

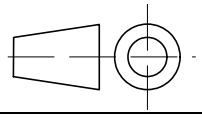


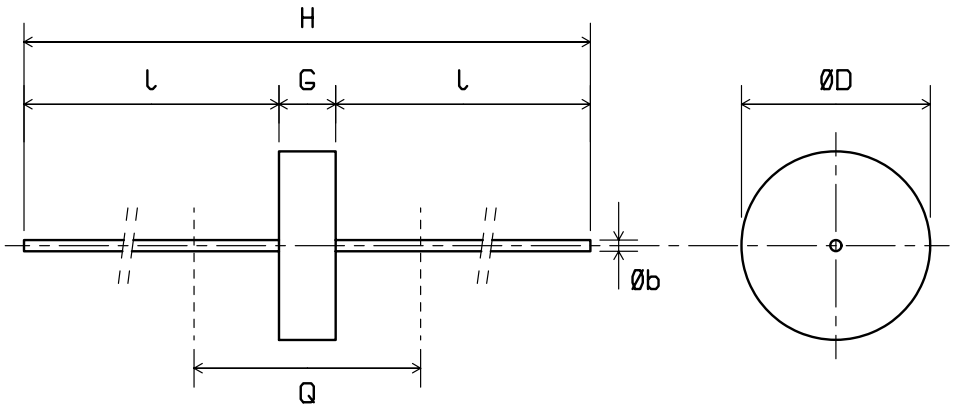
Cylindrical package, wrap-around terminals	**DAA009** ECY-R-T000
First-angle projection 	Version 001, revision 01



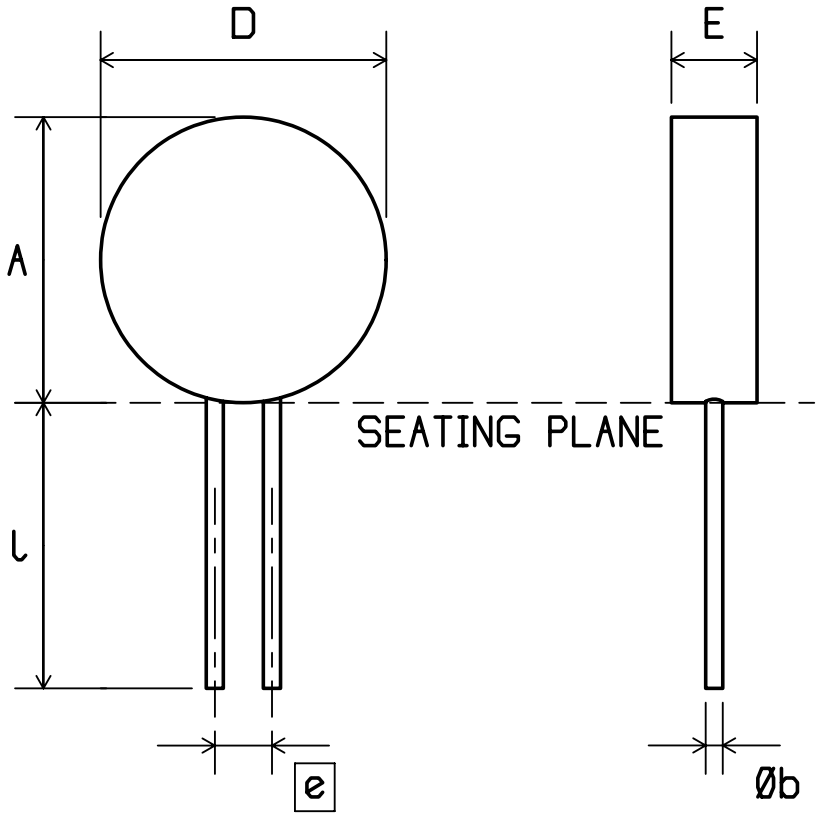
Cylindrical package, radial tag leads	**DAA010** RCY-D-T001
First-angle projection	Version 001, revision 01



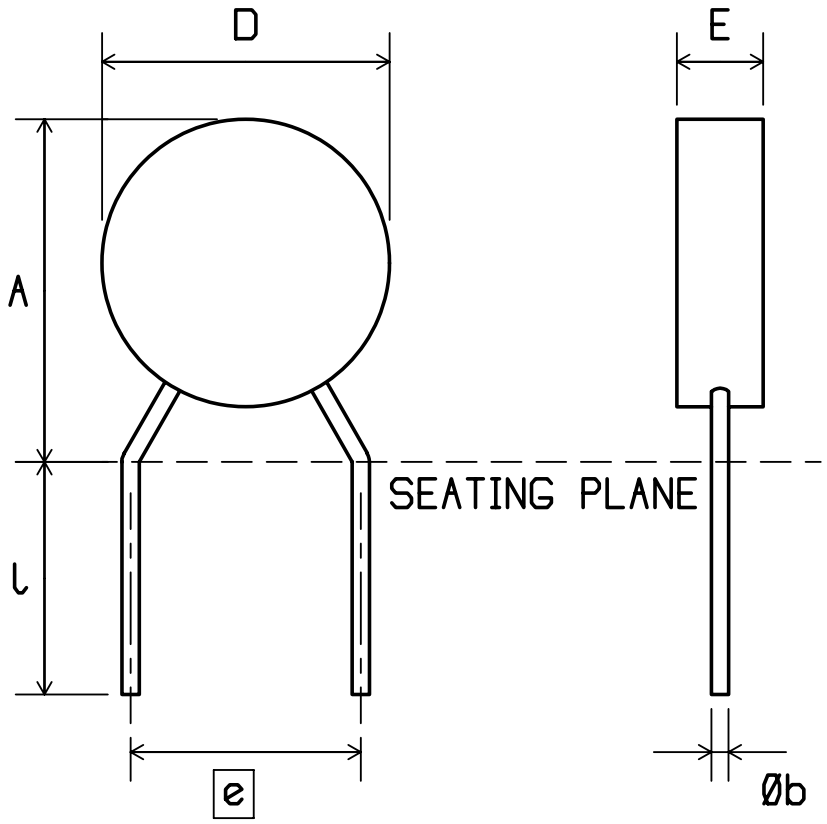
Cylindrical package, straight radial wire leads	**DAA011** RCY-W-T001
First-angle projection 	Version 001, revision 01



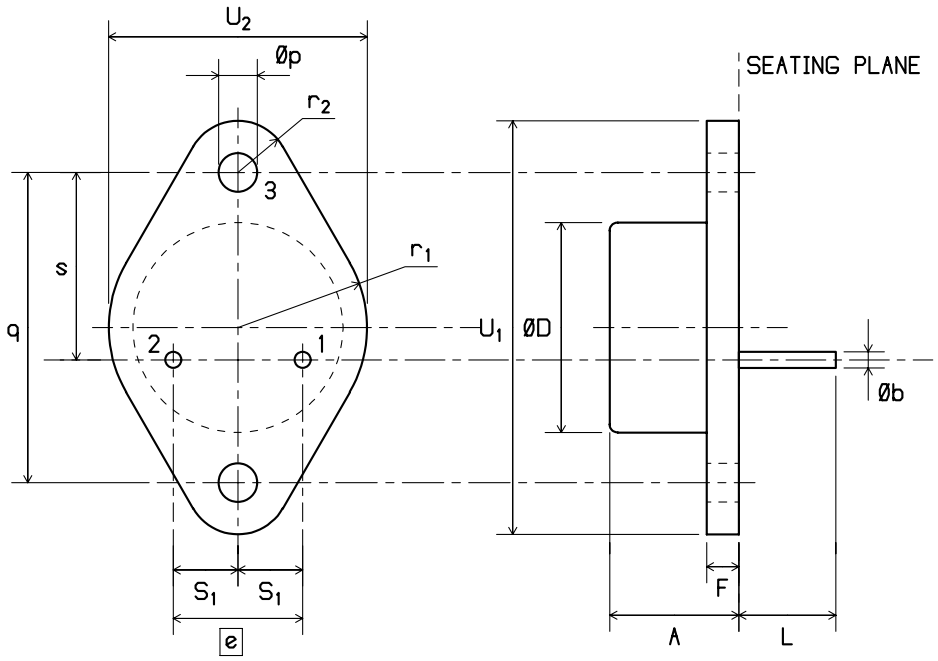
Disc package, straight axial wire leads	**DAA012** ADB-W-T001
First-angle projection	Version 001, revision 01



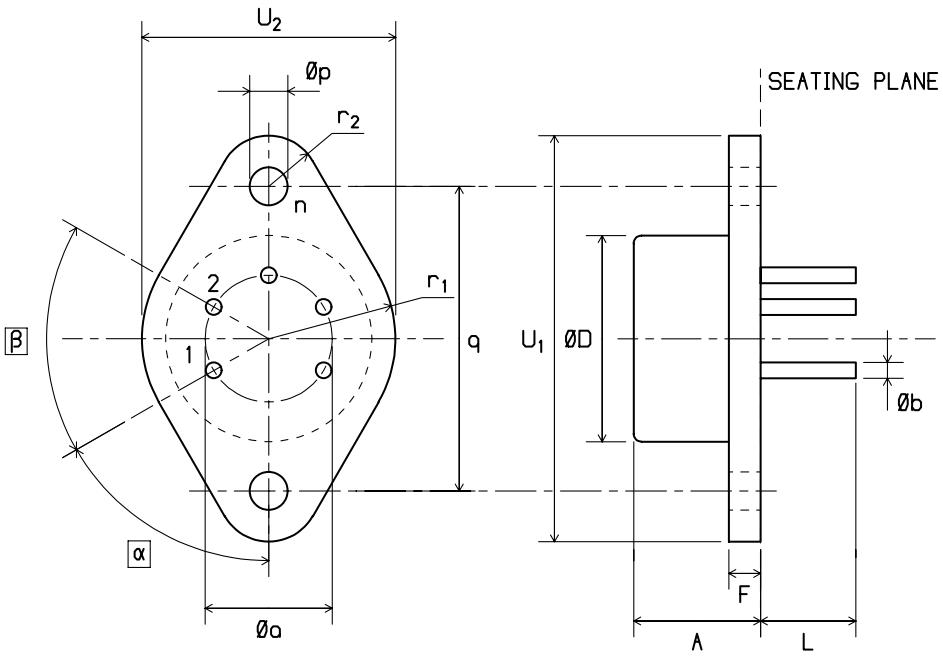
Disc package, straight bottom wire leads	**DAA013** BDB-W-T001
First-angle projection	Version 001, revision 01



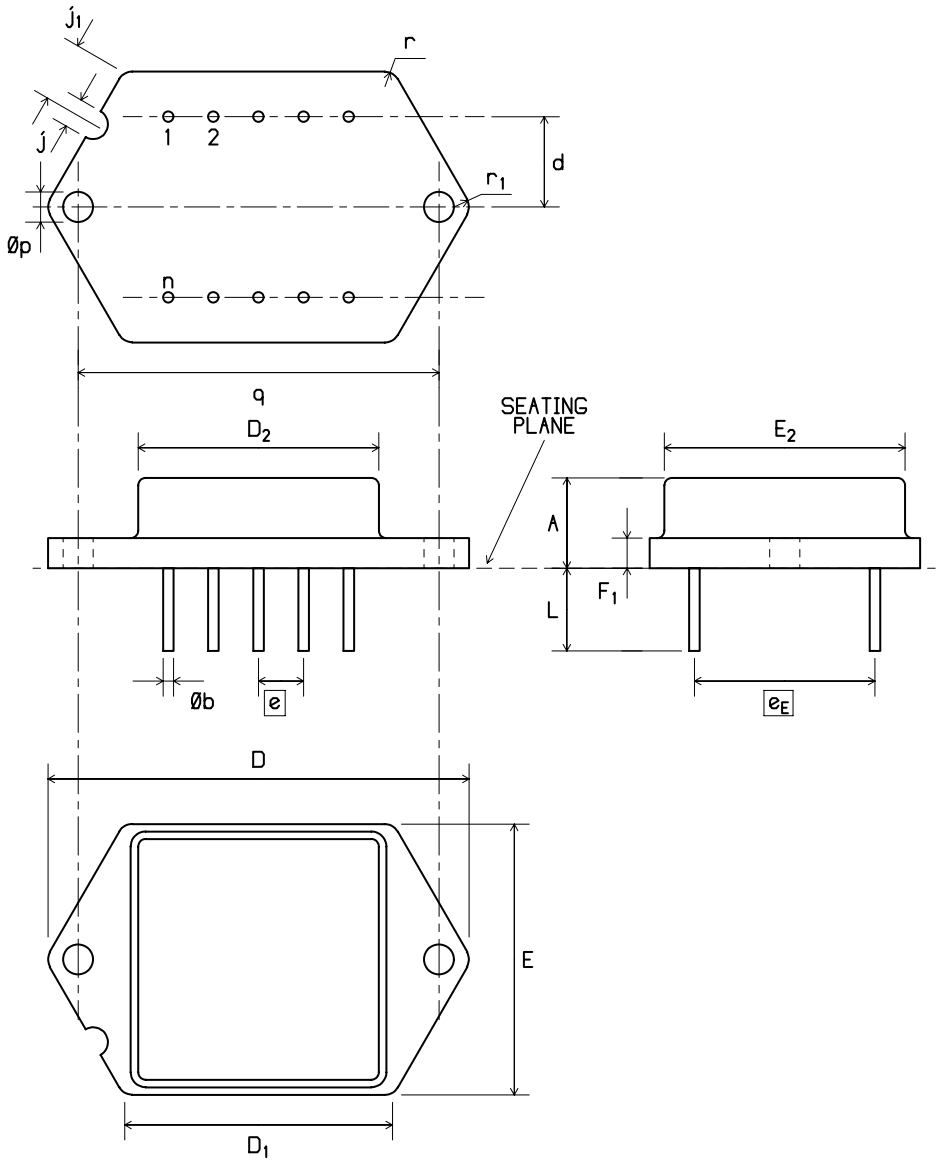
Disc package, formed bottom wire leads	**DAA014** BDB-W-T002
First-angle projection	Version 001, revision 01

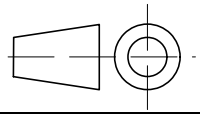


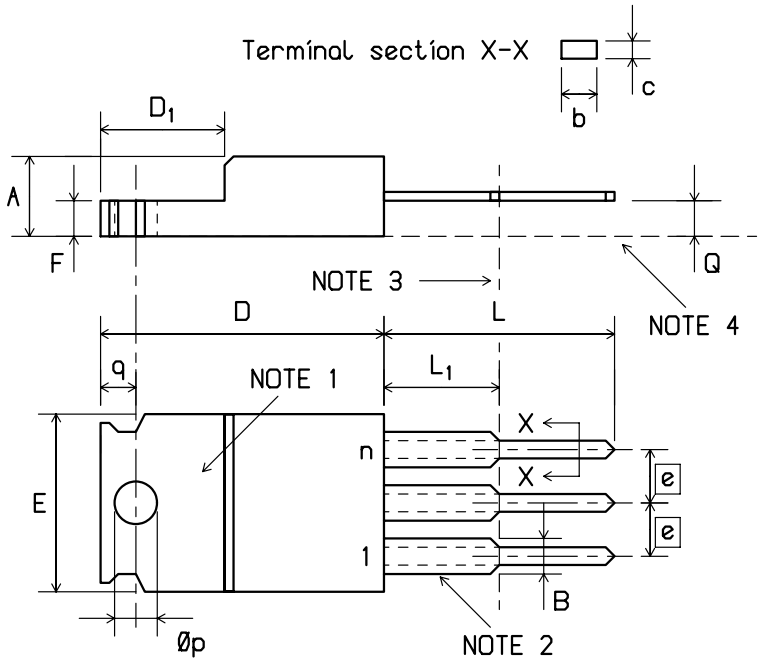
Oval flange-mount package, offset bottom pins	**DAA015** BFM-P-T007
First-angle projection	Version 001, revision 01



Oval flange-mount package, bottom pins on circle	**DAA016** BFM-P-T003
First-angle projection	Version 001, revision 01

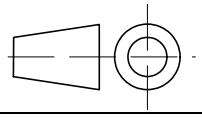


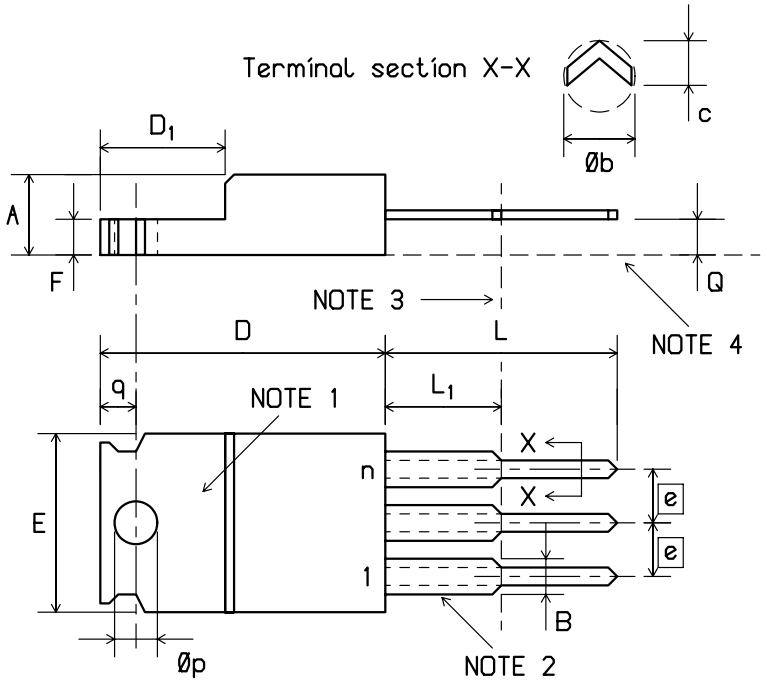
Flange-mount package, dual-in-line pins	**DAA017** DFM-P-T009
First-angle projection 	Version 001, revision 01



NOTES

1. The tab shape may vary within the limits of E and D_1
2. Within L_1, the terminal shapes may follow the dotted lines
3. Seating plane of terminals
4. Seating plane of heat sink

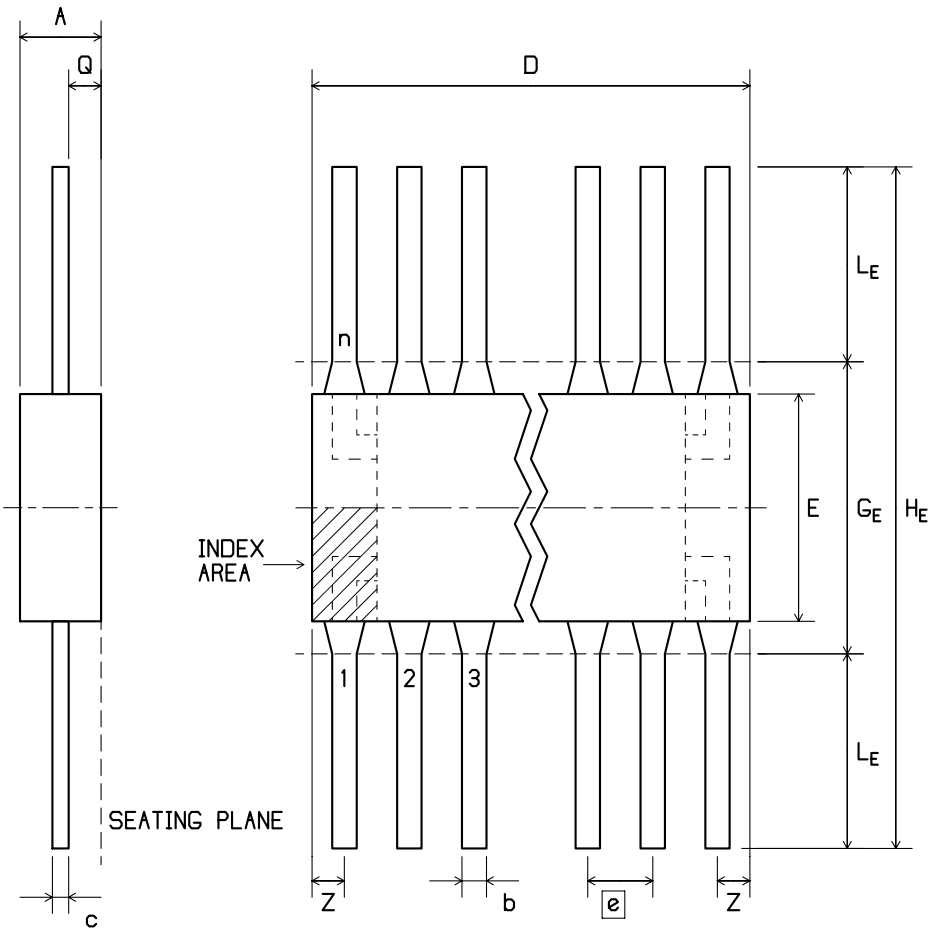
Flange-mount package, single row, straight flat leads	**DAA018** SFM-T-T011
First-angle projection 	Version 001, revision 01



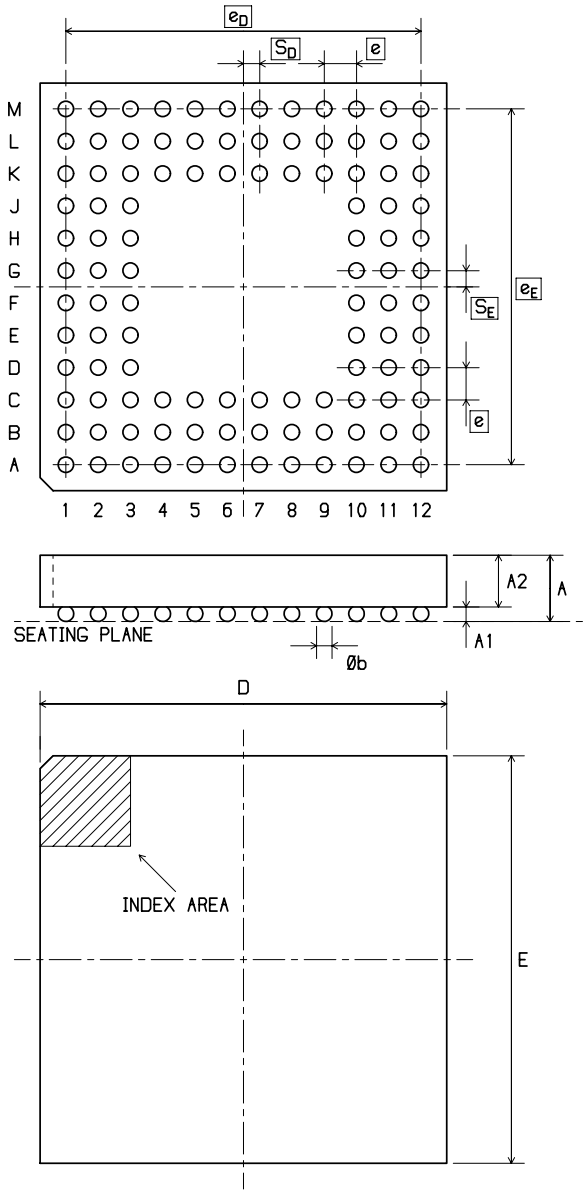
NOTES

1. The tab shape may vary within the limits of E and D_1
2. Within L_1, the terminal shapes may follow the dotted lines
3. Seating plane of terminals
4. Seating plane of heat sink

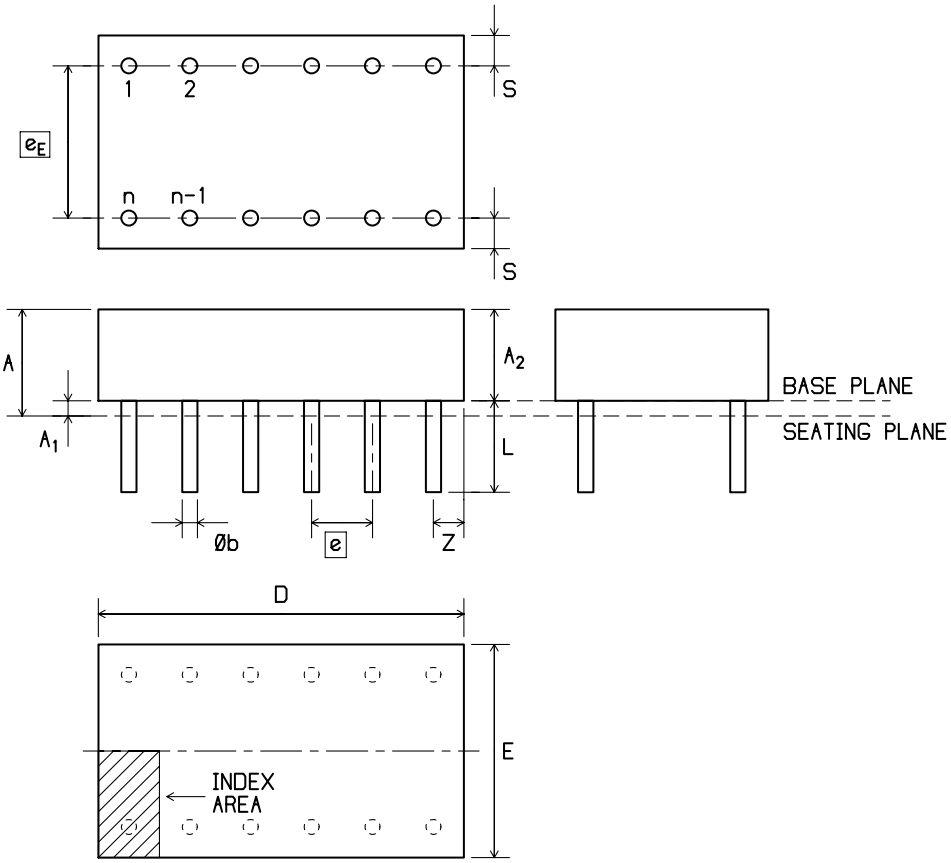
Flange-mount package, single row, straight V-section leads	**DAA019** SFM-T-T023
First-angle projection	Version 001, revision 01



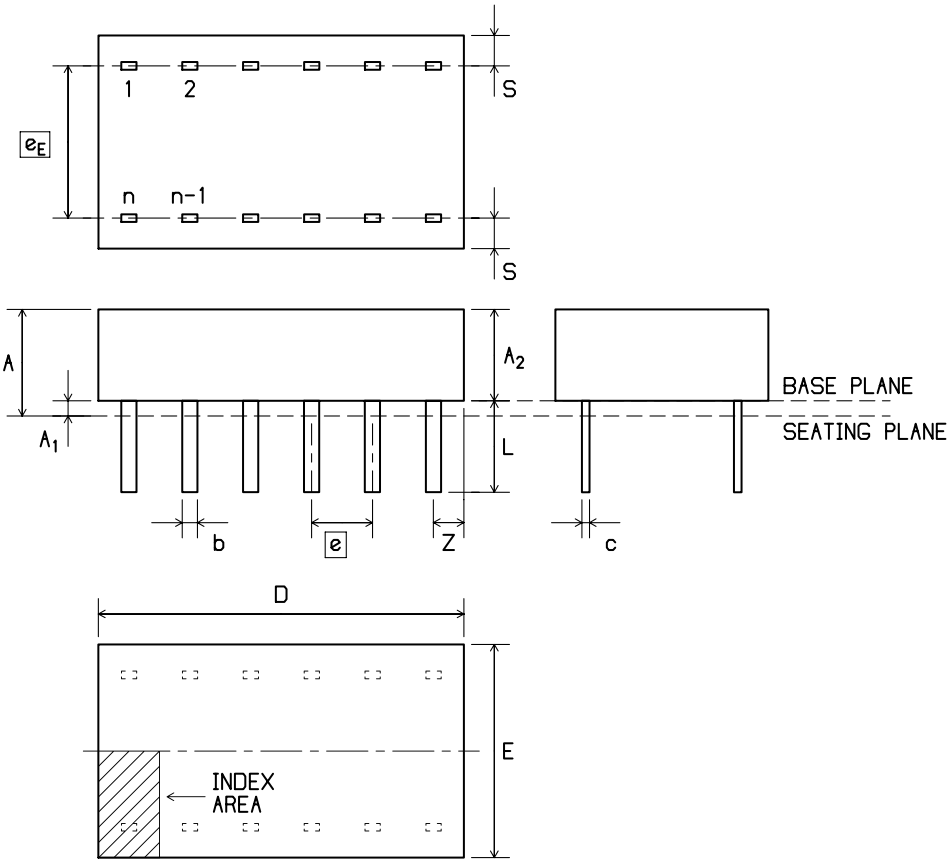
Dual flat pack, straight flat leads	**DAA020** DFP-F-T011
First-angle projection	Version 001, revision 01



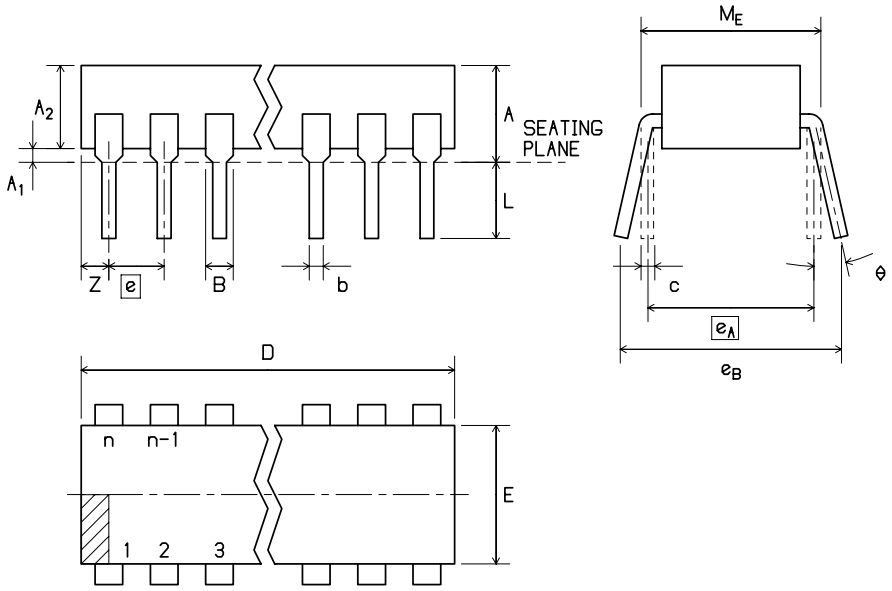
Ball-grid array package, bottom terminals	**DAA021** BGA-B-T012
First-angle projection	Version 001, revision 01



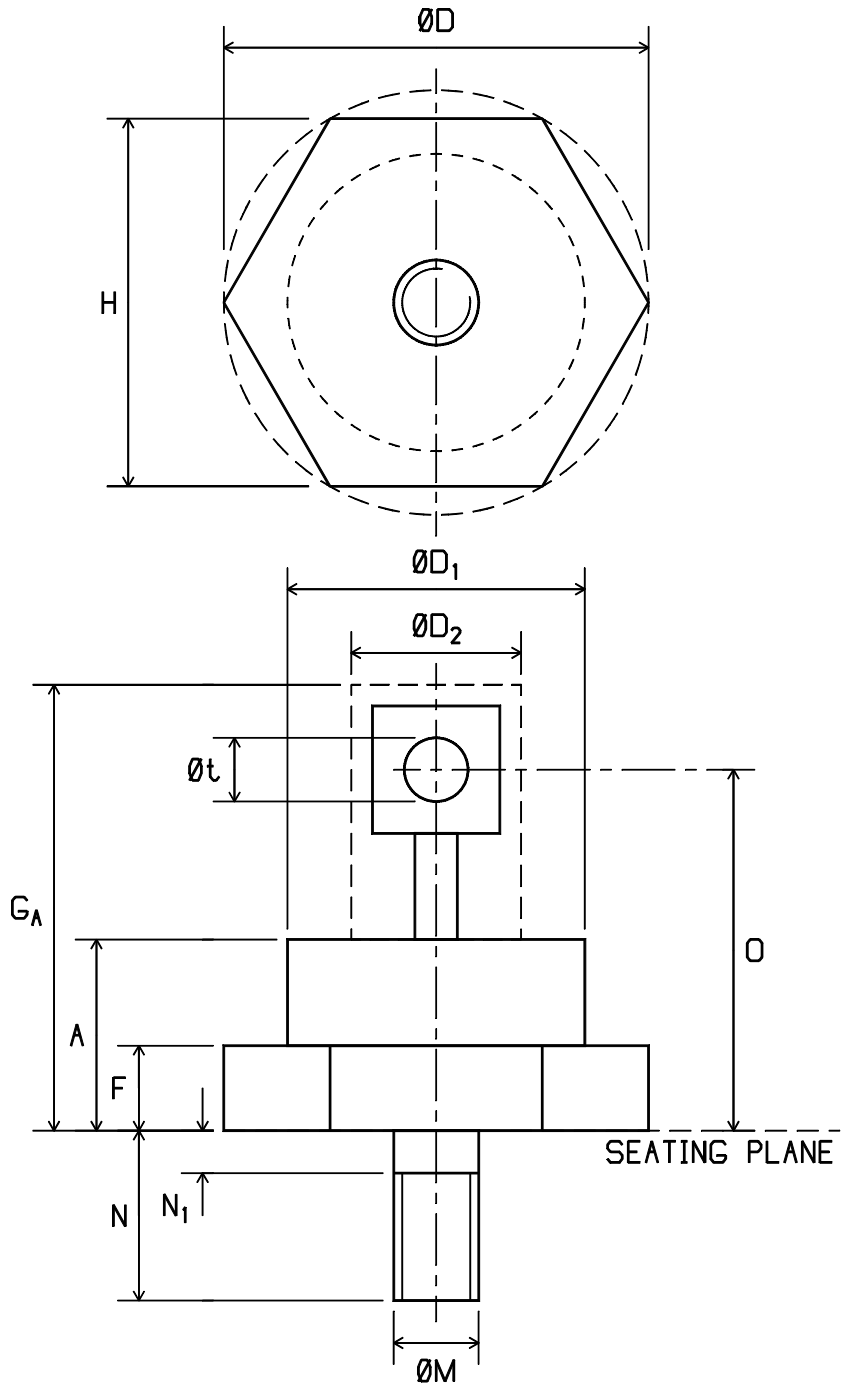
Dual-in-line package, round pins	**DAA022** DIP-P-T009
First-angle projection	Version 001, revision 01



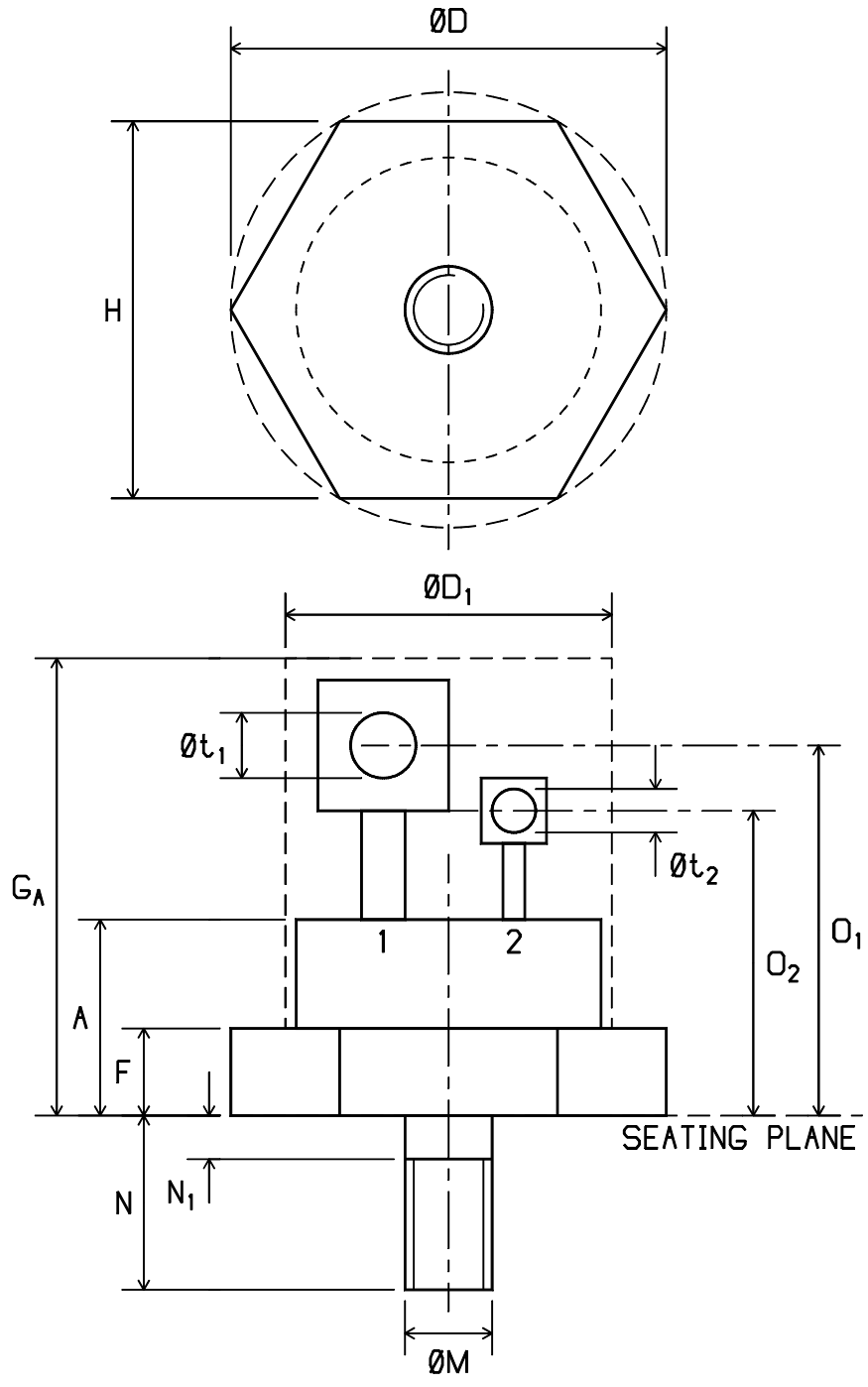
Dual-in-line package, rectangular pins	**DAA023** DIP-P-T010
First-angle projection	Version 001, revision 01



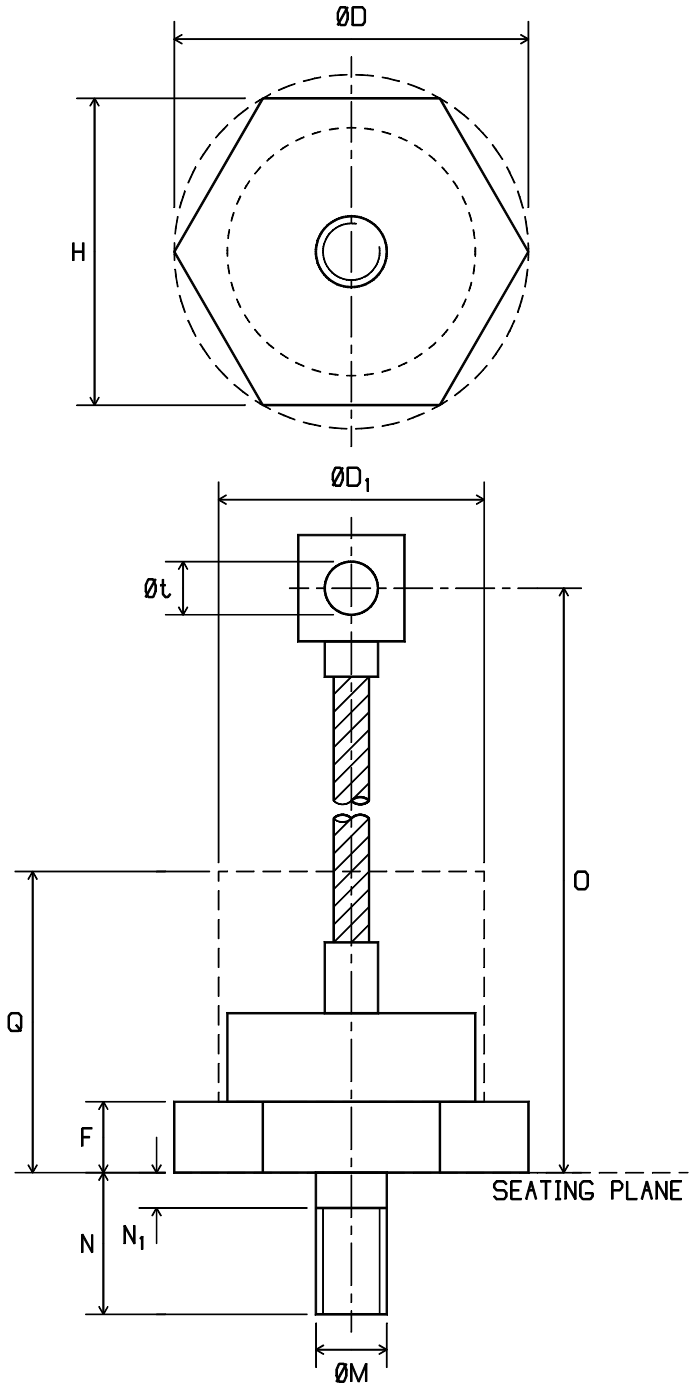
Dual-in-line package, standard through-hole leads	**DAA024** DIP-T-T000
First-angle projection	Version 001, revision 01



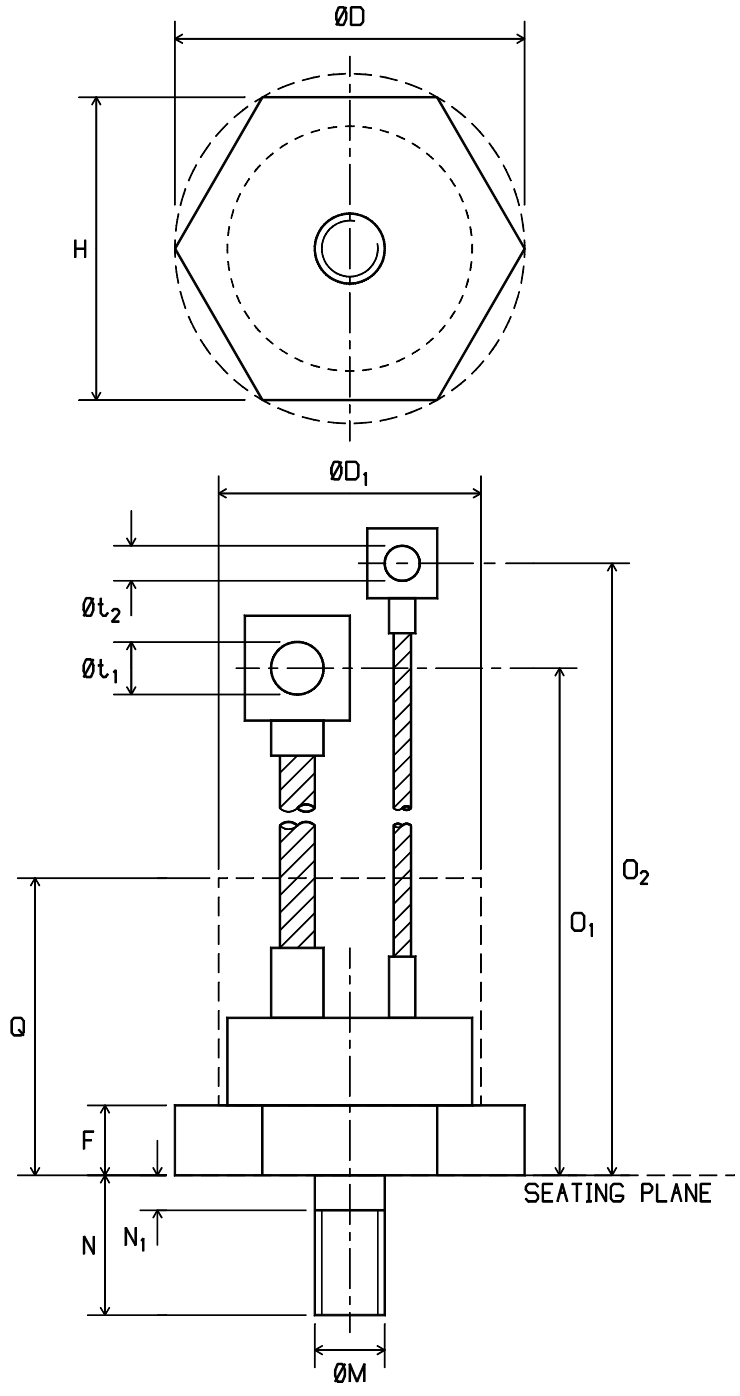
Stud-mount package, one fixed tag	**DAA025** UPM-D-T013
First-angle projection	Version 002, revision 01



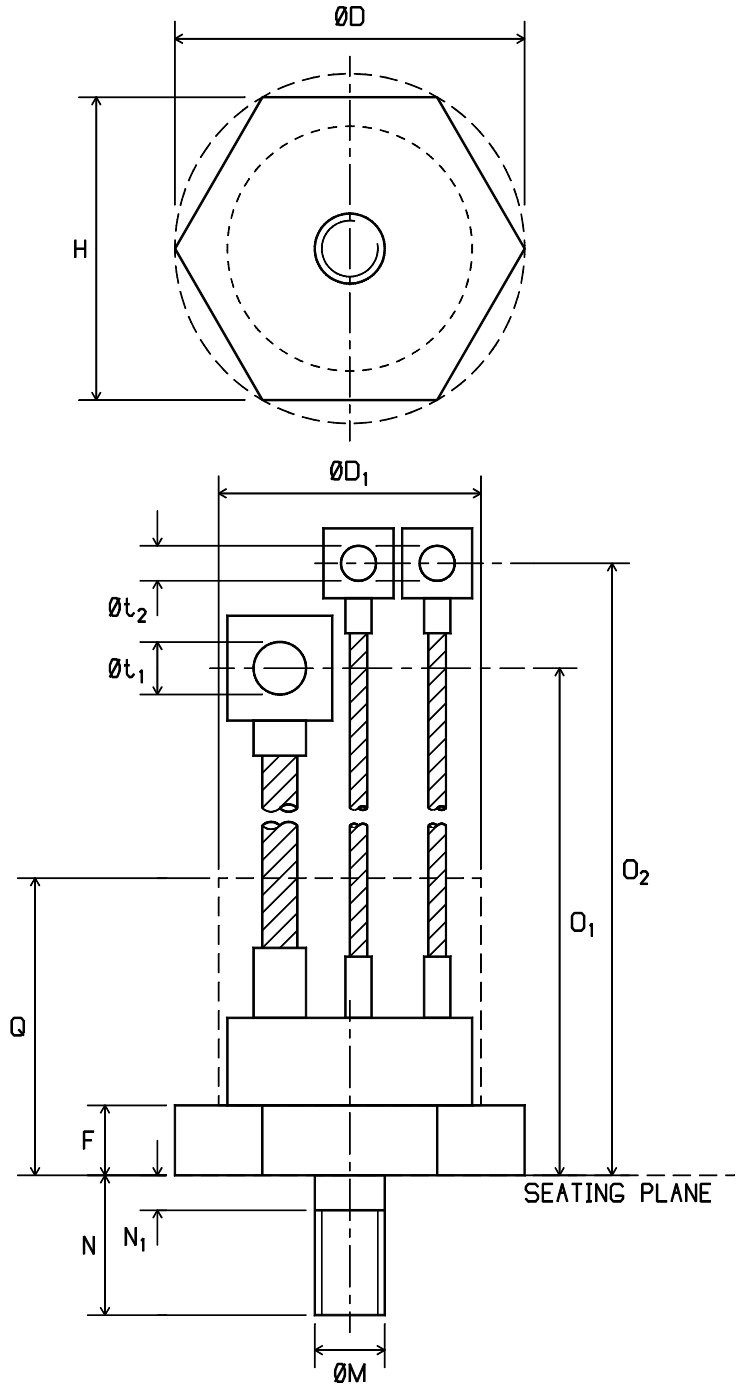
Stud-mount package, two fixed tags	**DAA026** UPM-D-T014
First-angle projection	Version 002, revision 01



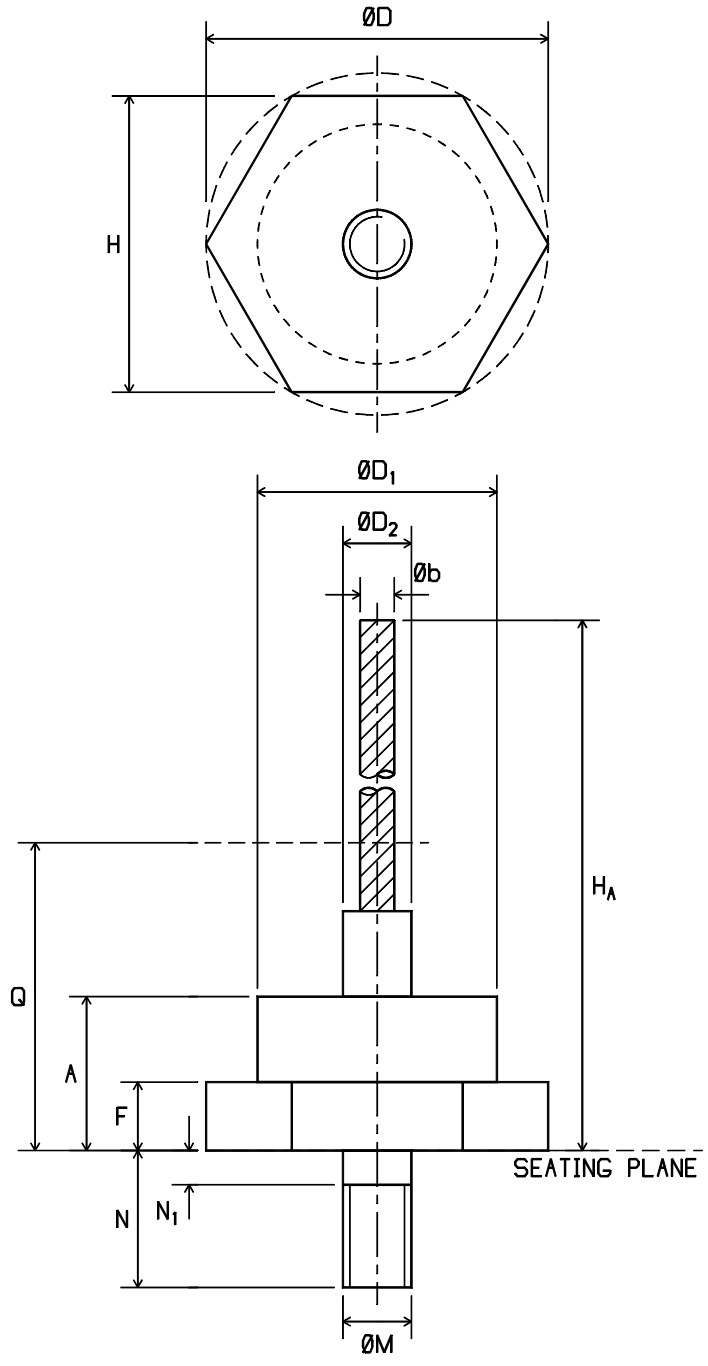
Stud-mount package, one flexible lead with tag	**DAA027** UPM-H-T015
First-angle projection	Version 002, revision 01



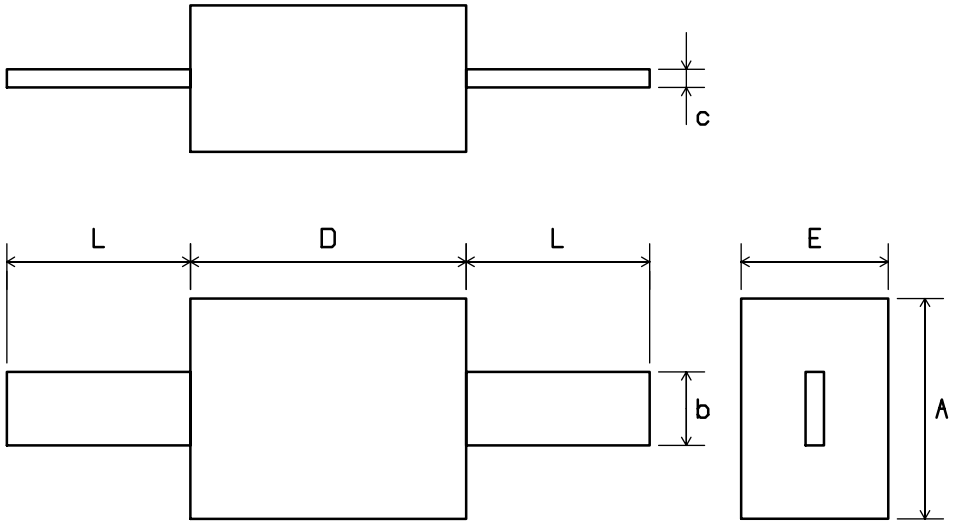
Stud-mount package, two flexible leads with tags	**DAA028** UPM-H-T016
First-angle projection	Version 002, revision 01



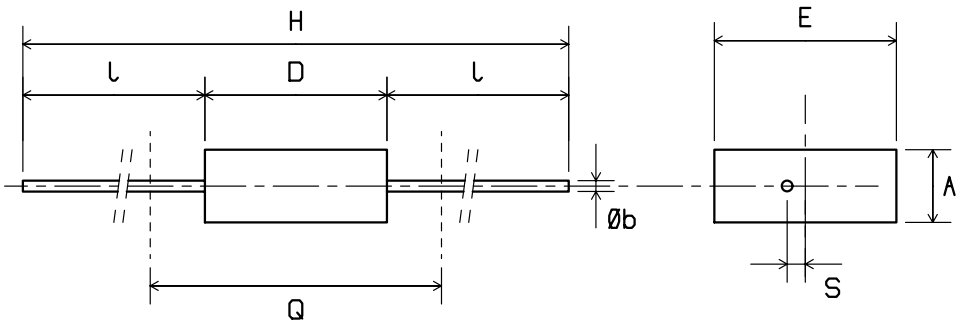
Stud-mount package, three flexible leads with tags	**DAA029** UPM-H-T017
First-angle projection	Version 002, revision 01

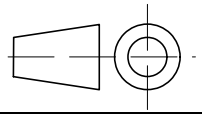


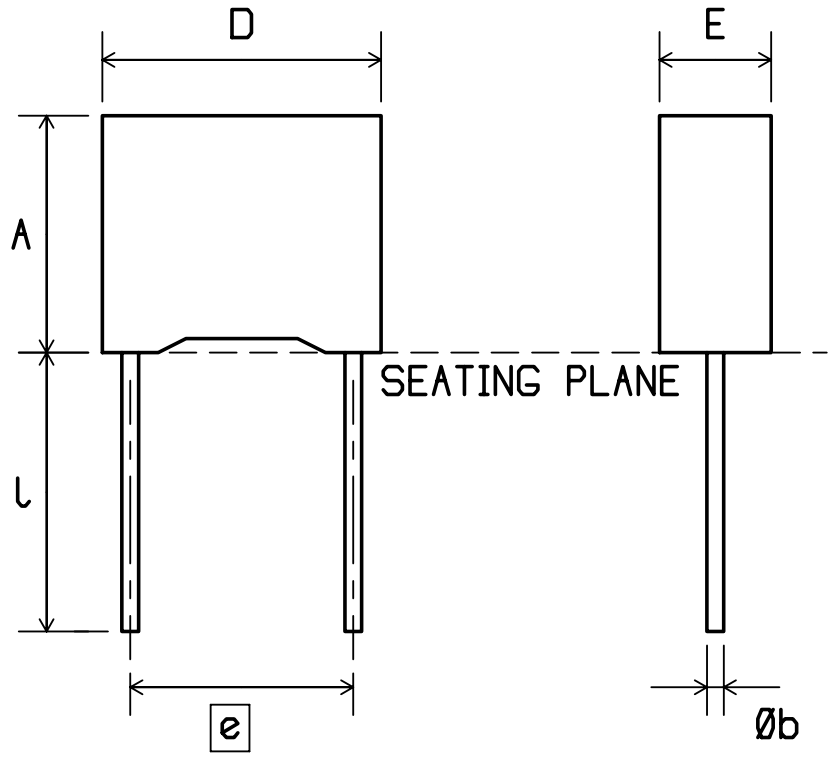
Stud-mount package, one flexible lead, no tag	**DAAA30** UPM-H-T018
First-angle projection	Version 001, revision 01



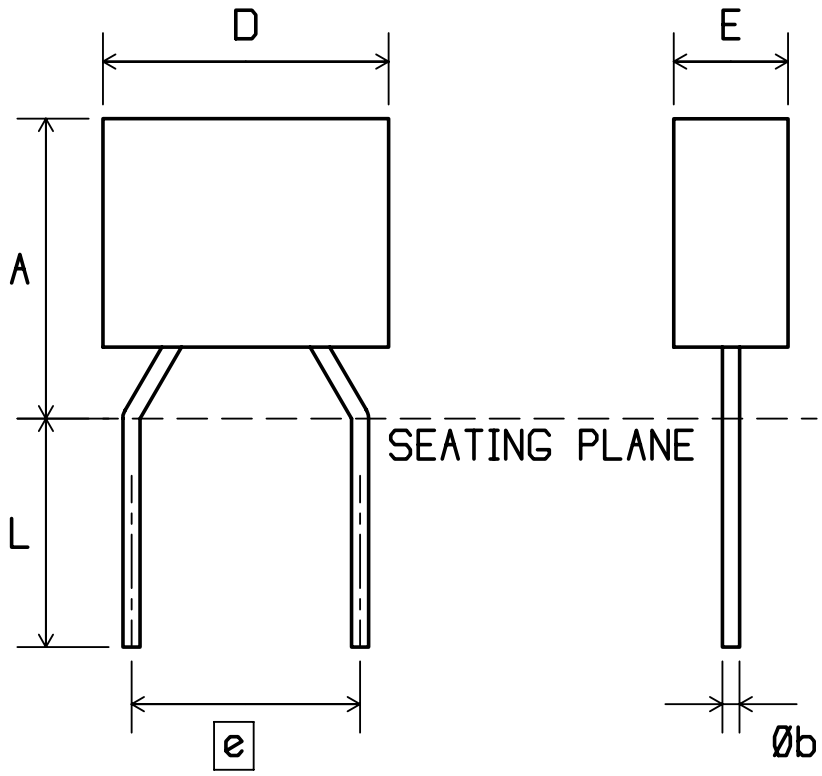
Rectangular package, axial strip leads	**DAA031** ARC-D-T019
First-angle projection	Version 001, revision 01



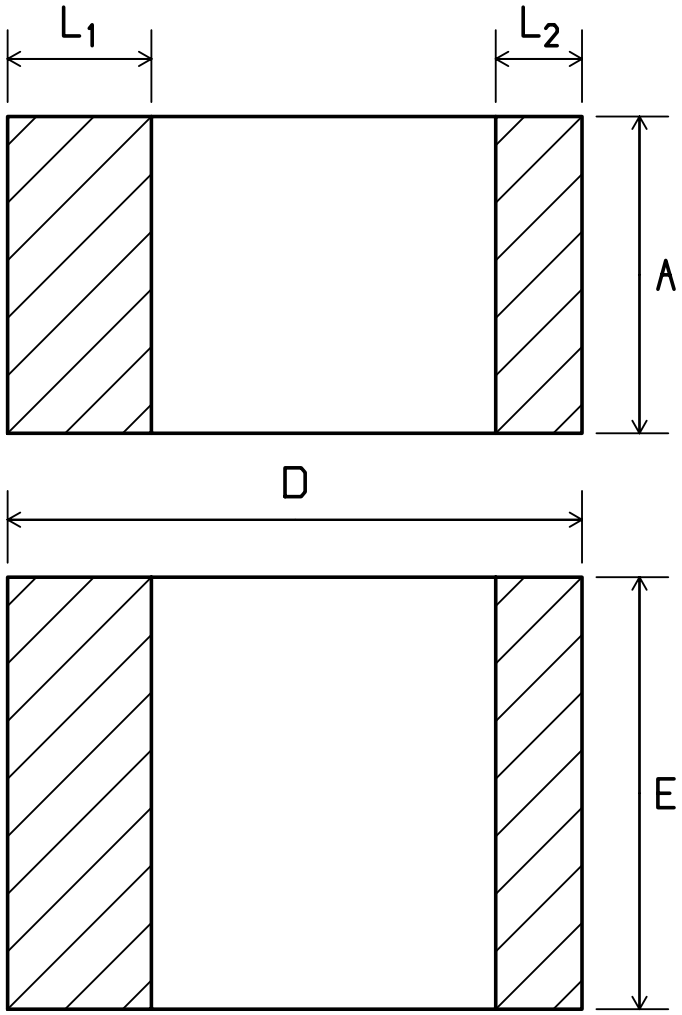
Rectangular package, offset axial wire leads		**DAA032** ARC-W-T007
First-angle projection		Version 001, revision 01



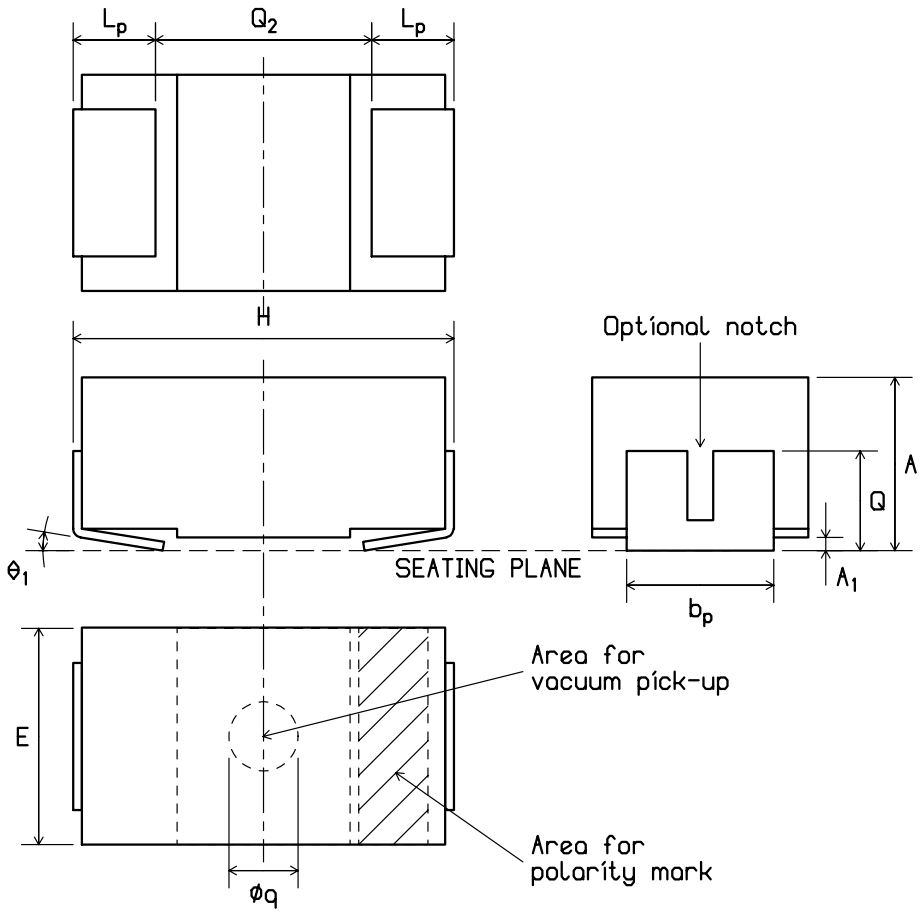
Rectangular package, straight bottom wire leads	**DAA033** BRC-W-T001
First-angle projection	Version 001, revision 01



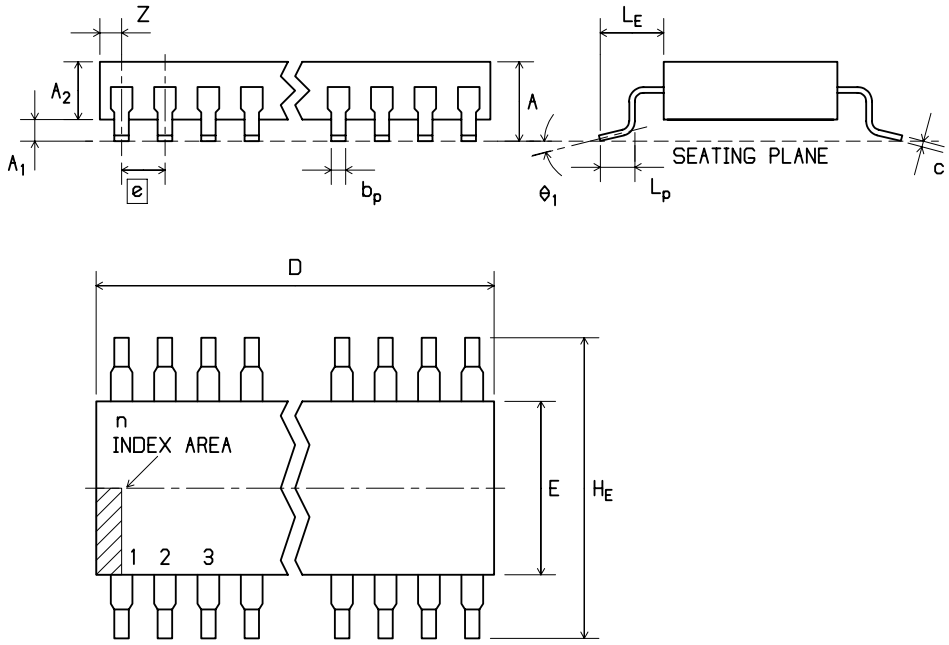
Rectangular package, formed bottom wire leads	**DAA034** BRC-W-T002
First-angle projection	Version 001, revision 01



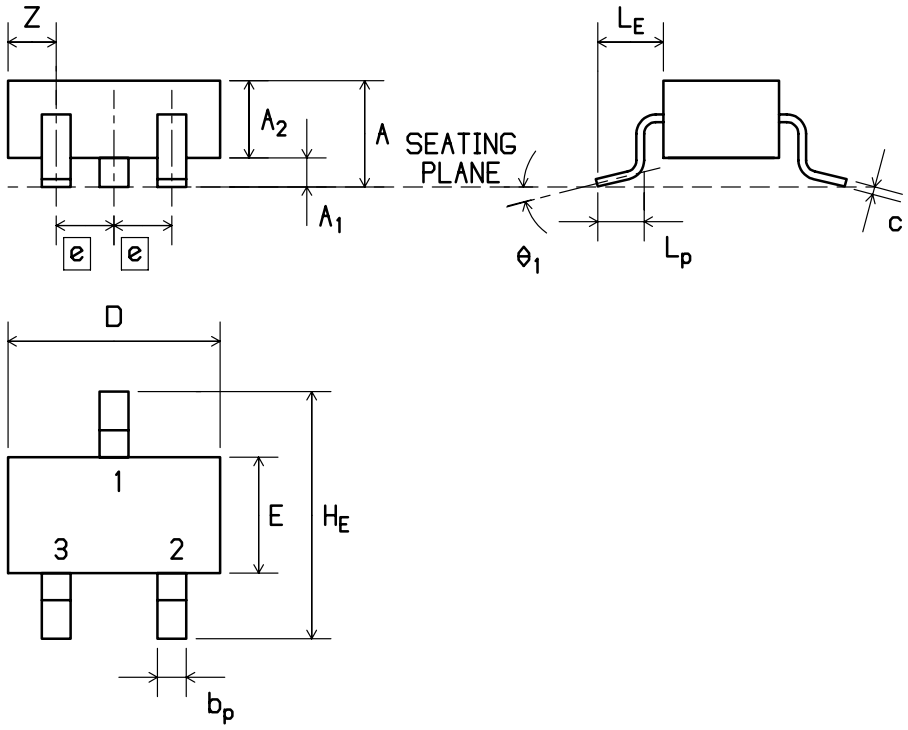
Rectangular package, metallised ends	**DAA035** ERC-M-T000
First-angle projection	Version 001, revision 01



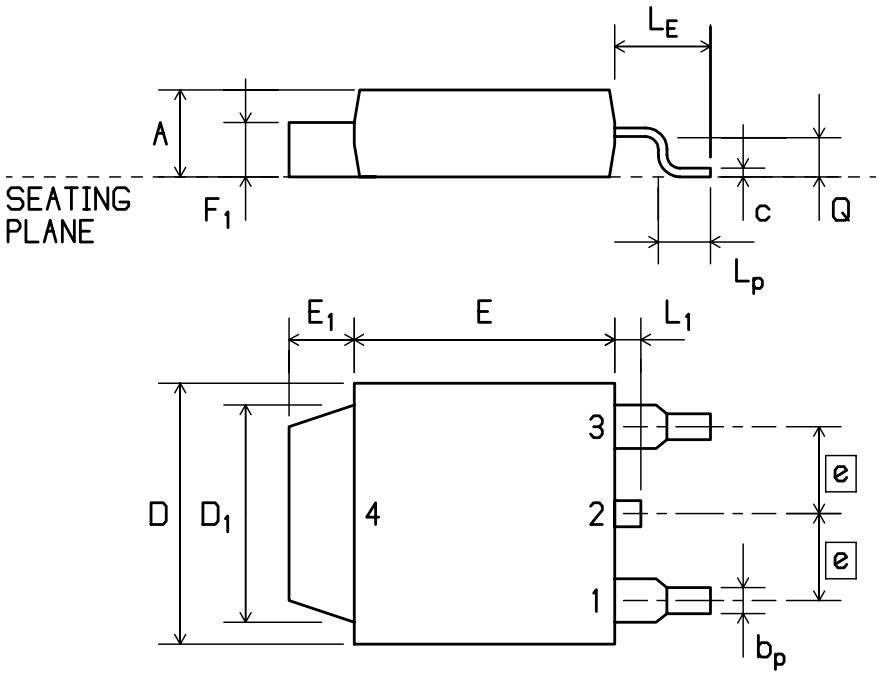
Rectangular package, wrap-around terminals	**DAA36** ERC-R-T000
First-angle projection	Version 001, revision 01



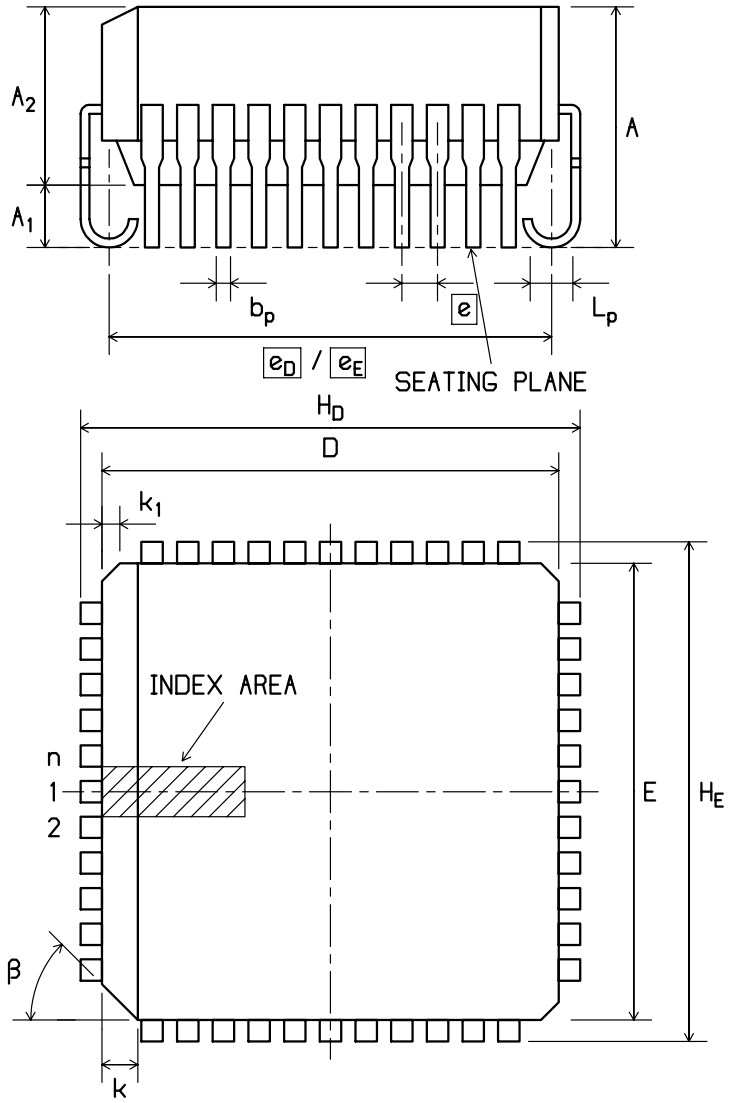
Dual small-outline package, multiple gull-wing leads	**DAA037** DSO-G-T020
First-angle projection	Version 001, revision 01



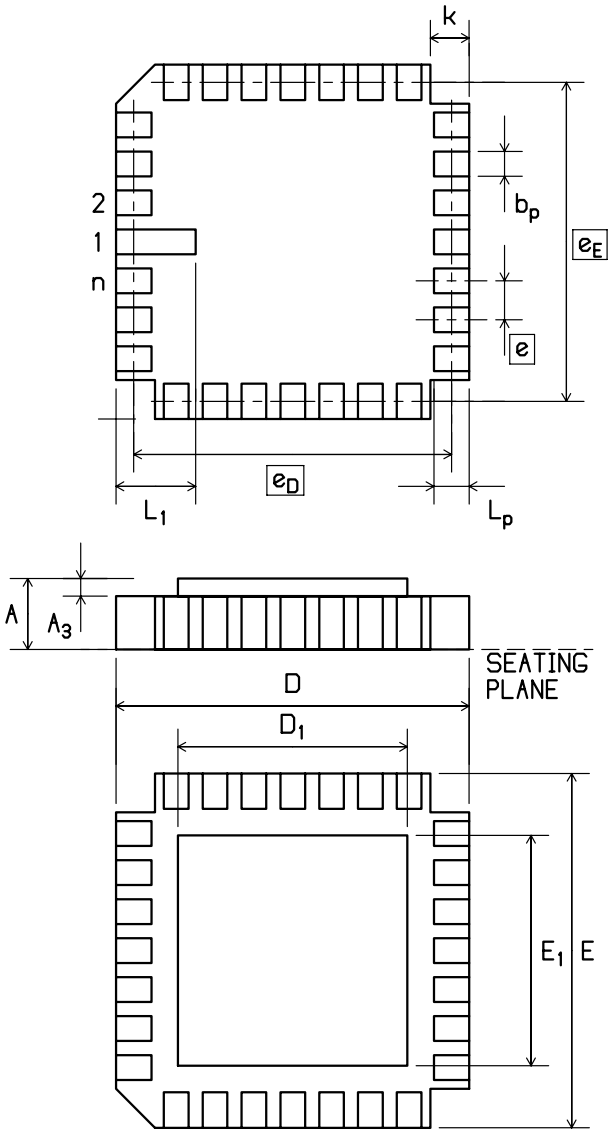
Small-outline package, three gull-wing leads	**DAA038** DSO-G-T021
First-angle projection	Version 001, revision 01

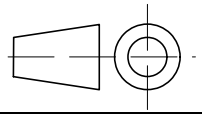


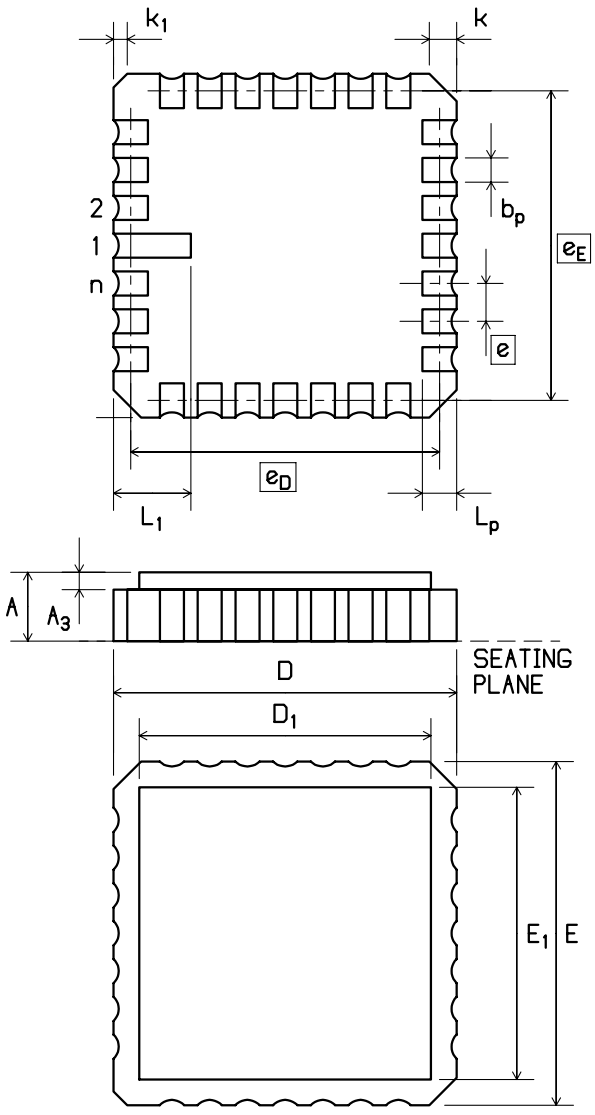
Small-outline package, two gull-wing leads, stub and tab	**DAA039** SSO-G-T022
First-angle projection	Version 001, revision 01



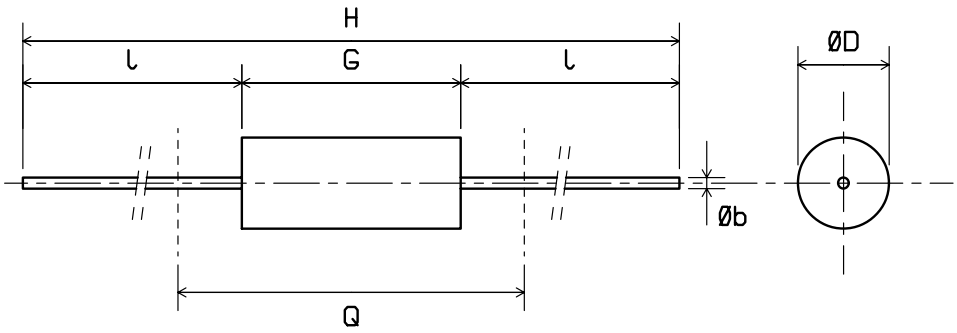
Quad chip carrier, J-bend leads, non-bumped package	**DAA040** QCC-J-T000-B002
First-angle projection	Version 001, revision 01

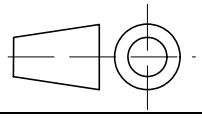


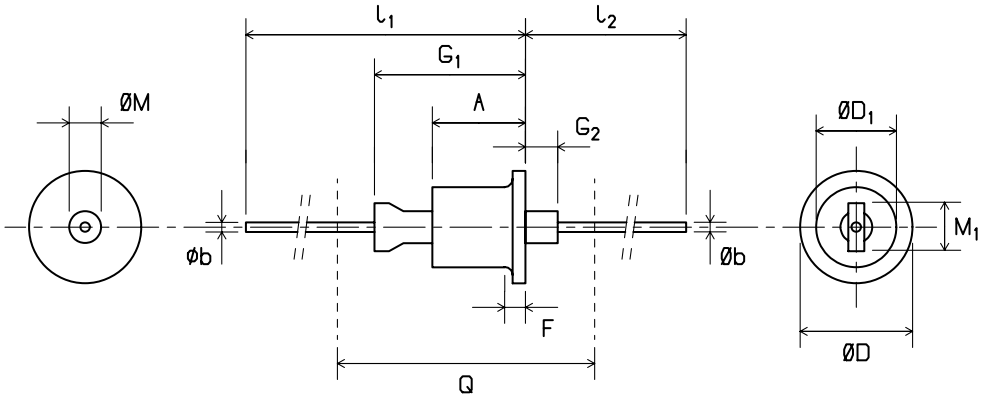
Quad chip carrier, leadless non-cavity package (moulded)	**DAA041** QCC-N-T000-B009
First-angle projection 	Version 001, revision 01

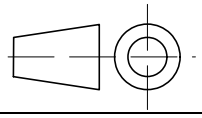


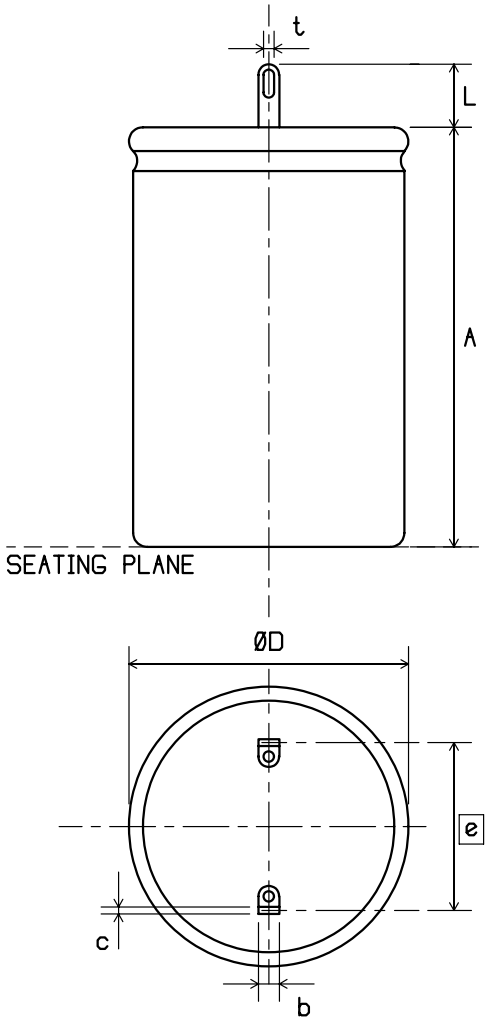
Quad chip carrier, leadless cavity package (ceramic)	**DAA042** QCC-N-T000-B010
First-angle projection	Version 001, revision 01



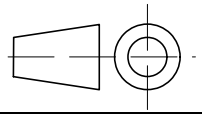
Cylindrical package, straight axial wire leads	**DAA043** **ACY-W-T001-B003**
First-angle projection 	Version 001, revision 01

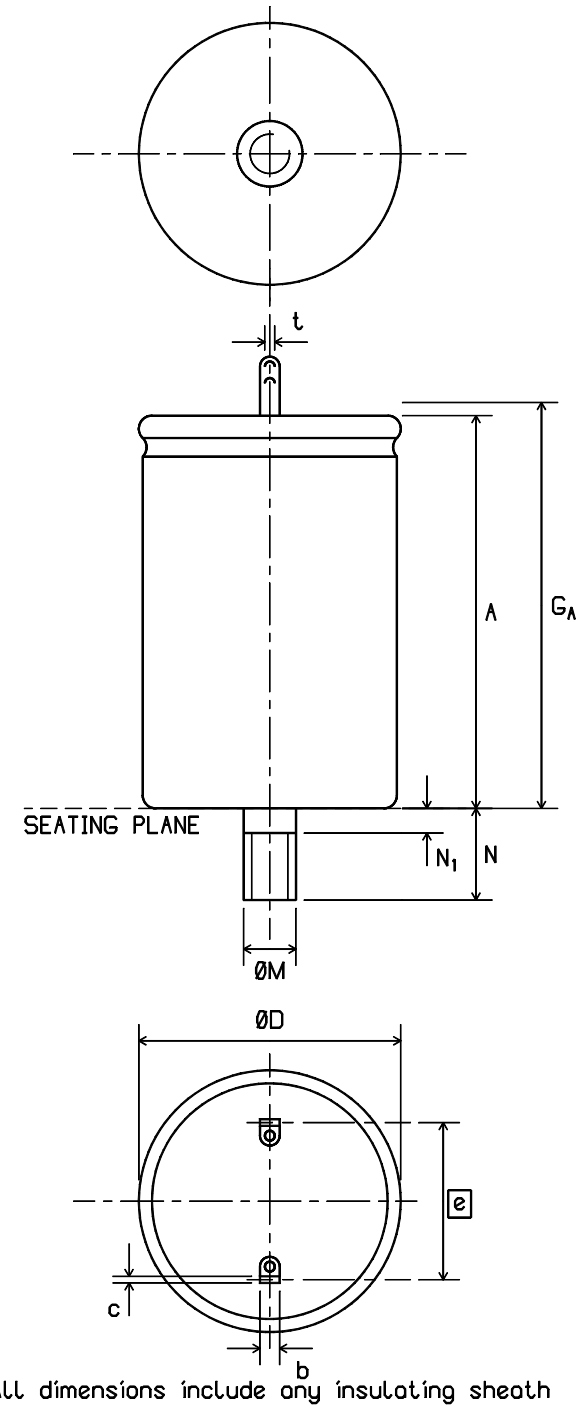


Top-hat package, straight axial wire leads	**DAA044** ACY-W-T001-B004
First-angle projection 	Version 001, revision 01

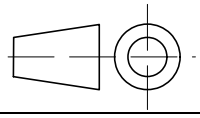


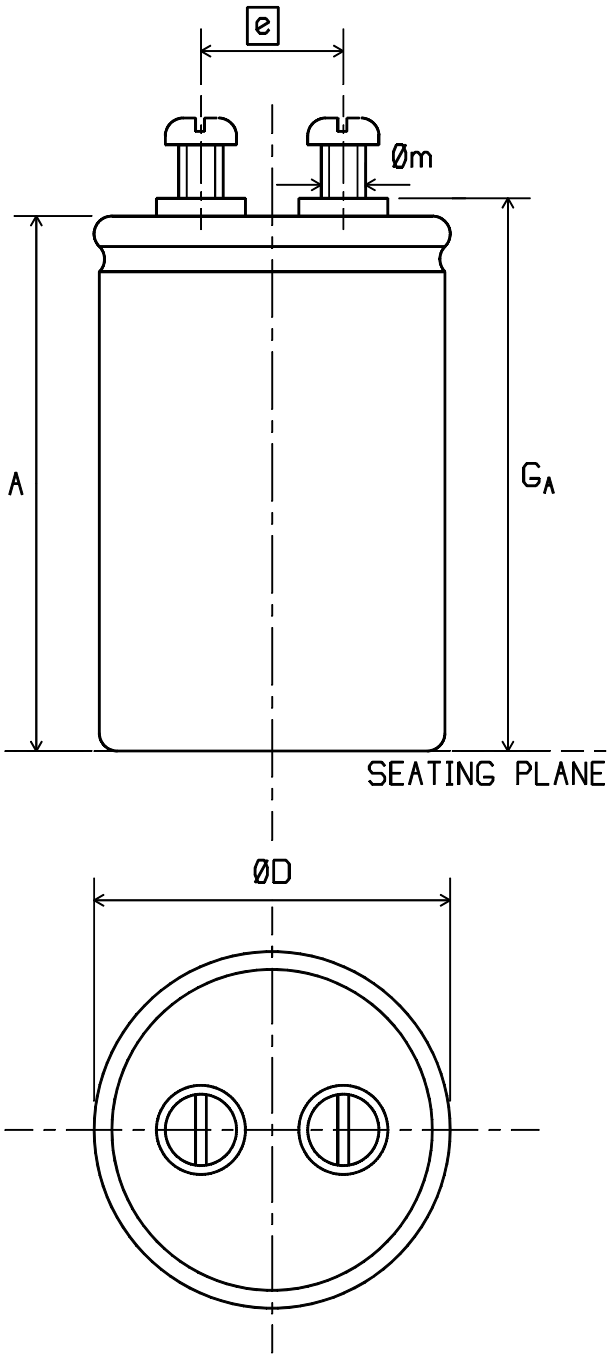
All dimensions include any insulating sheath

Cylindrical package, top tag terminals, clamp mount	**DAA045** UCY-D-T000-B005
First-angle projection 	Version 001, revision 01

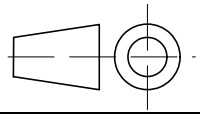


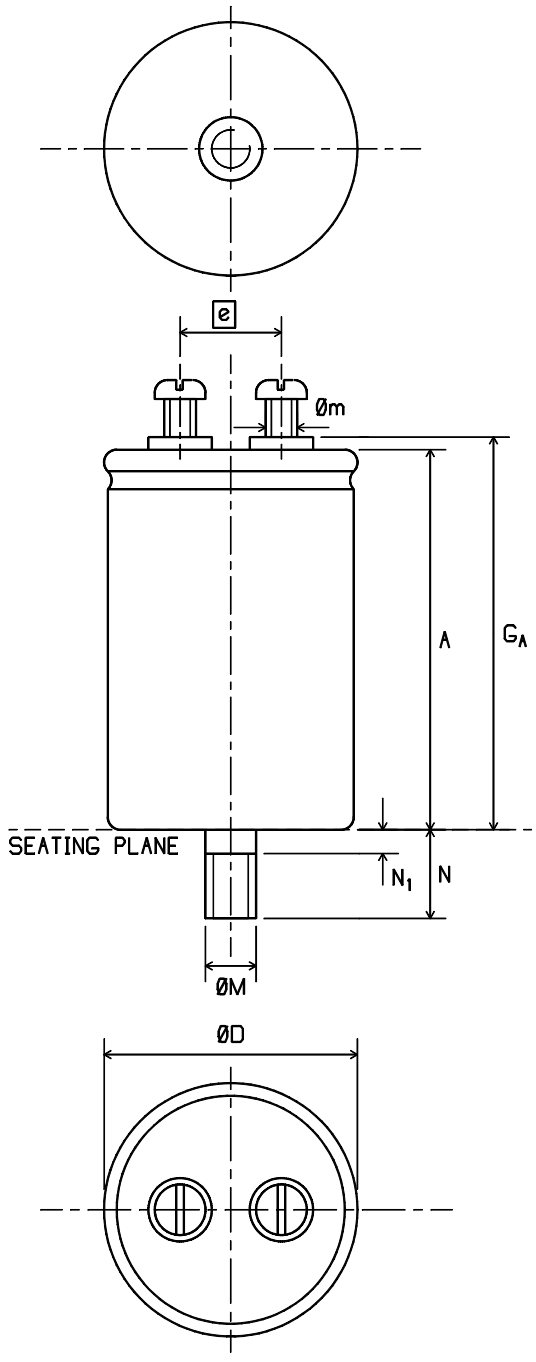
All dimensions include any insulating sheath

Cylindrical package, top tag terminals, stud mount	**DAA046** UCY-D-T000-B006
First-angle projection 	Version 002, revision 01



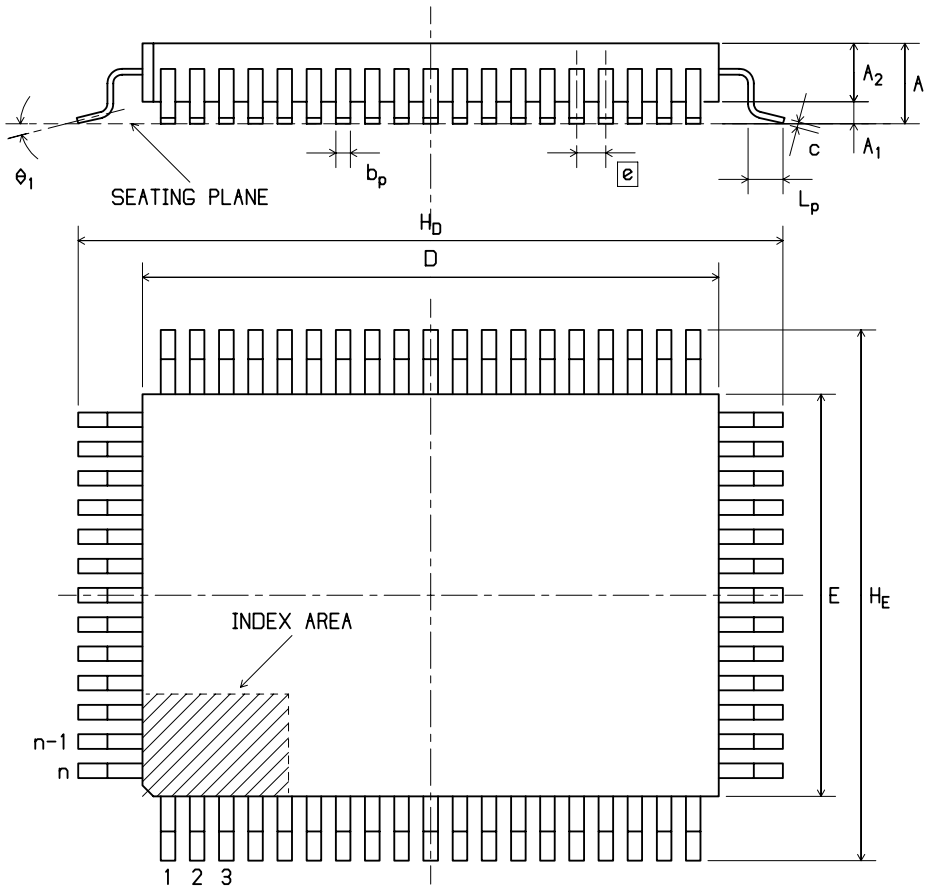
All dimensions include any insulating sheath

Cylindrical package, top screw terminals, clamp mount	**DAA047** UCY-Y-T000-B005
First-angle projection 	Version 001, revision 01

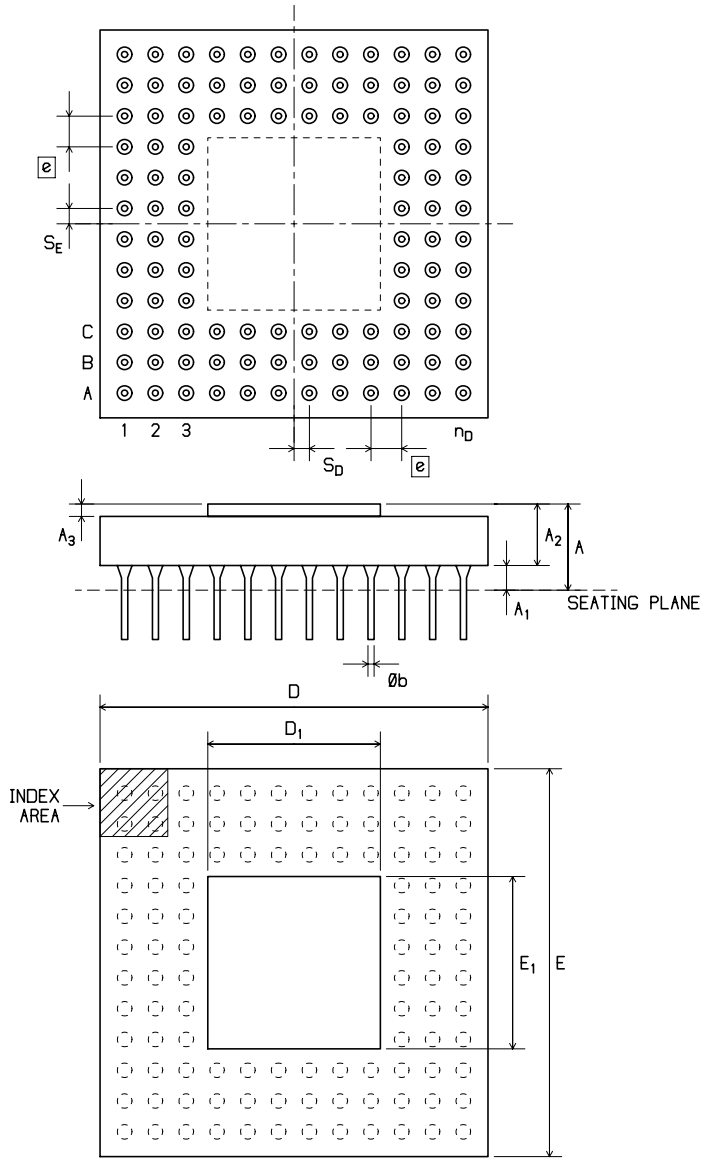


All dimensions include any insulating sheath

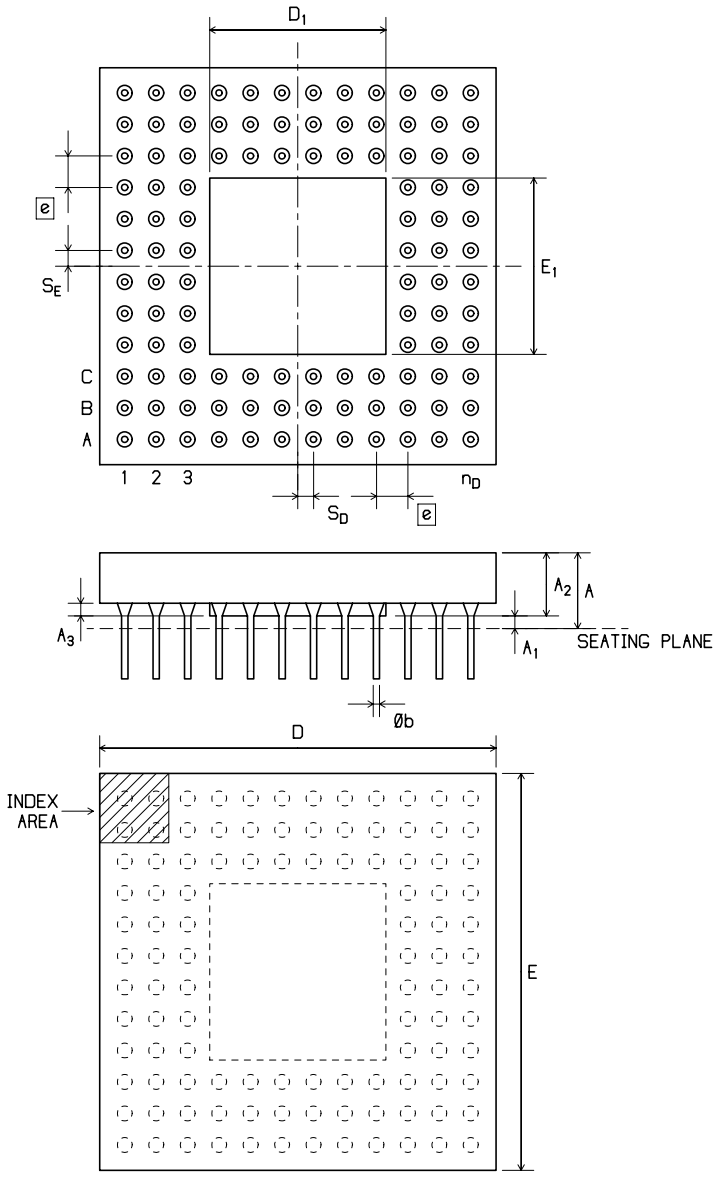
Cylindrical package, top screw terminals, stud mount	**DAA048** UCY-Y-T000-B006
First-angle projection	Version 002, revision 01



Quad flat pack, gull-wing leads, non-bumped package	**DAA049** QFP-G-T000-B002
First-angle projection	Version 001, revision 01



Pin-grid array package, cavity up	**DAA050** PGA-P-T009-B007
First-angle projection	Version 001, revision 01



Pin-grid array package, cavity down	**DAA051** PGA-P-T009-B008
First-angle projection	Version 001, revision 01

Annex E
(normative)

Figures

E.1 Figure definitions

DAE001-001 01

Package length, width and height

DXF	DAE001.DXF
JPEG	DAE001.JPG
Windows Meta-File	DAE001.WMF

DAE002-001 01

Die dimensions

DXF	DAE002.DXF
JPEG	DAE002.JPG
Windows Meta-File	DAE002.WMF

DAE003-001 01

Bumped die dimensions

DXF	DAE003.DXF
JPEG	DAE003.JPG
Windows Meta-File	DAE003.WMF

DAE004-001 01

Cylindrical package dimensions

DXF	DAE004.DXF
JPEG	DAE004.JPG
Windows Meta-File	DAE004.WMF

DAE005-001 01

In-line package dimensions

DXF	DAE005.DXF
JPEG	DAE005.JPG
Windows Meta-File	DAE005.WMF

DAE009-001 01

Lead lengths and diameters

DXF	DAE009.DXF
JPEG	DAE009.JPG
Windows Meta-File	DAE009.WMF

DAE012-001 01

Terminal splay dimensions

DXF	DAE012.DXF
JPEG	DAE012.JPG
Windows Meta-File	DAE012.WMF

DAE021-001 01

Package overall widths

DXF	DAE021.DXF
JPEG	DAE021.JPG
Windows Meta-File	DAE021.WMF

DAE040-001 01

Terminal emergence height

DXF	DAE040.DXF
JPEG	DAE040.JPG
Windows Meta-File	DAE040.WMF

DAE042-001 01

Oval flange-mount package dimensions

DXF	DAE042.DXF
JPEG	DAE042.JPG
Windows Meta-File	DAE042.WMF

DAE092-001 01

Cylindrical stud-mount package dimensions

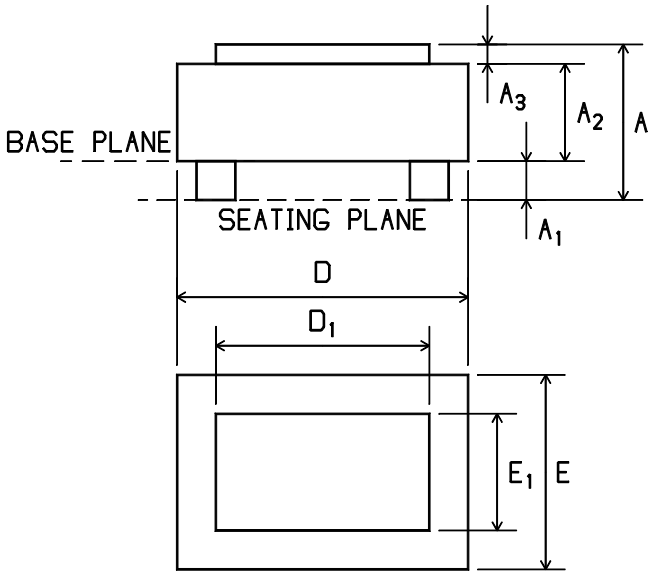
DXF	DAE092.DXF
JPEG	DAE092.JPG
Windows Meta-File	DAE092.WMF

DAE119-001 01

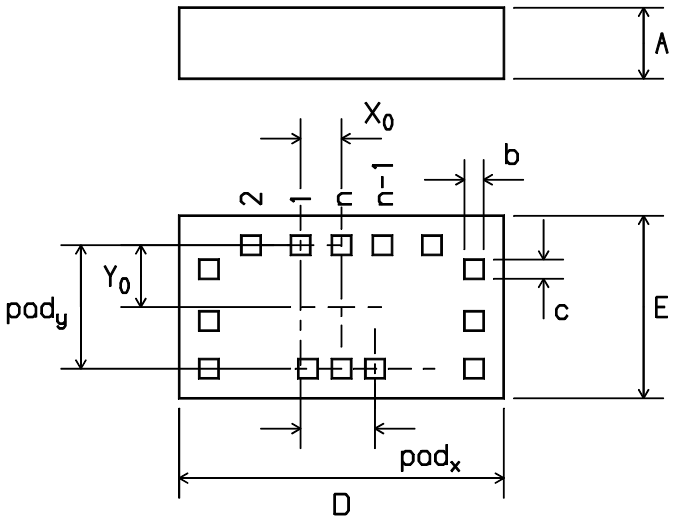
Dimensions of packages with tags

DXF	DAE119.DXF
JPEG	DAE119.JPG
Windows Meta-File	DAE119.WMF

E.2 Figures

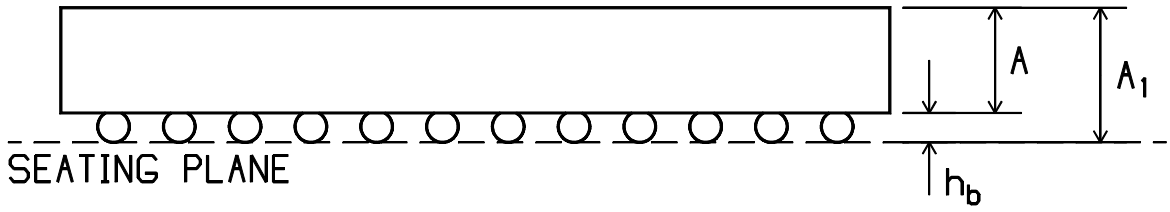


Package length, width and height	**DAE001**
First-angle projection	Version 001, revision 01

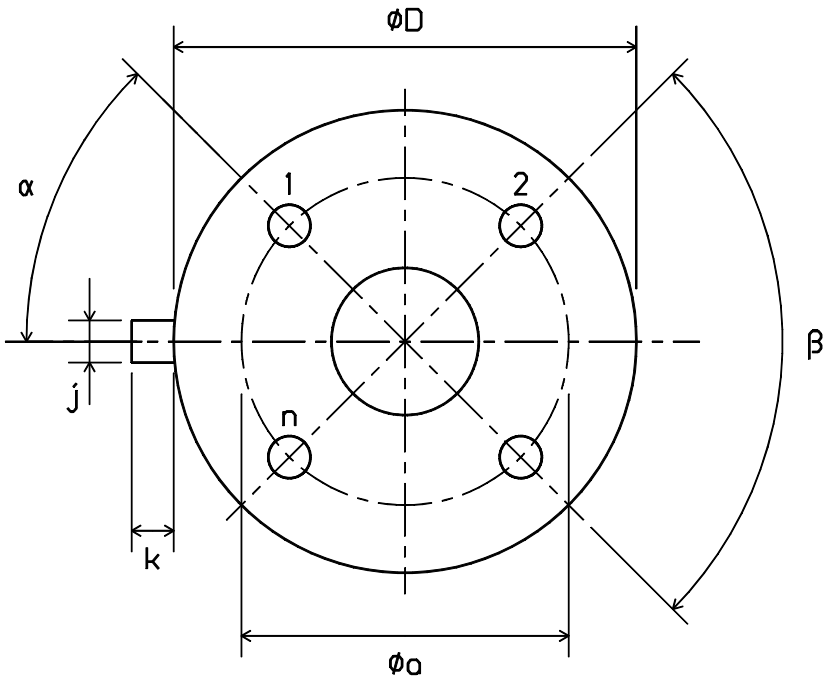


The geometric origin is at the centre of pad 1

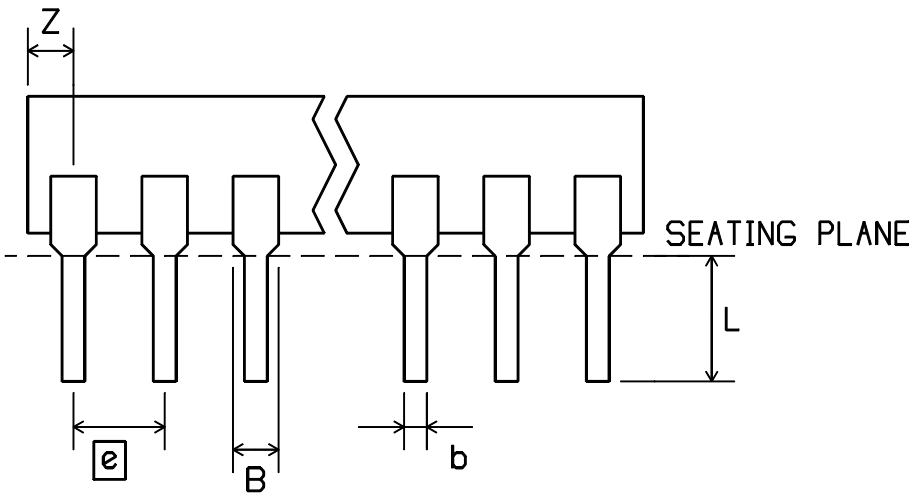
Die dimensions	**DAE002**
First-angle projection	Version 001, revision 01



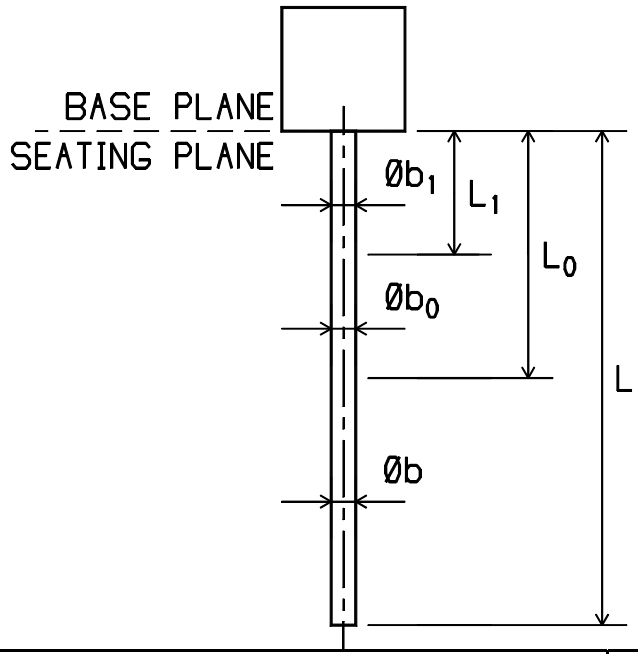
Bumped die dimensions	**DAE003**
First-angle projection	Version 001, revision 01



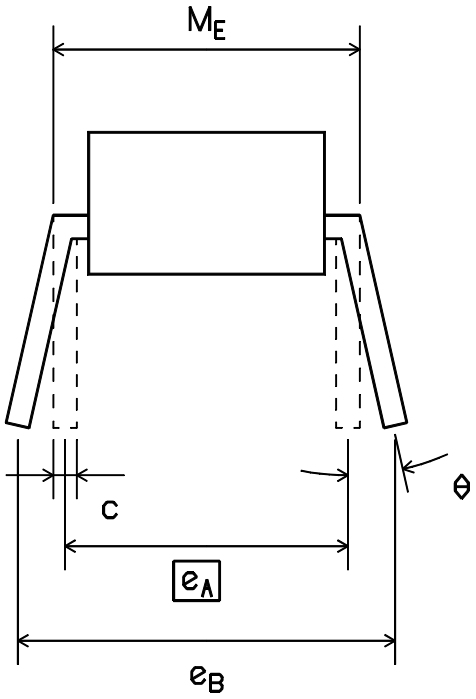
Cylindrical package dimensions	**DAE004**
First-angle projection	Version 001, revision 01

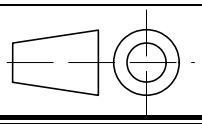


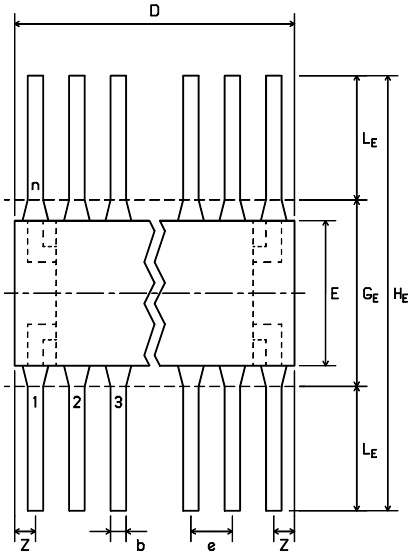
In-line package dimensions	**DAE005**
First-angle projection	Version 001, revision 01

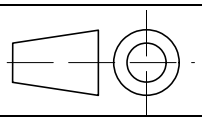


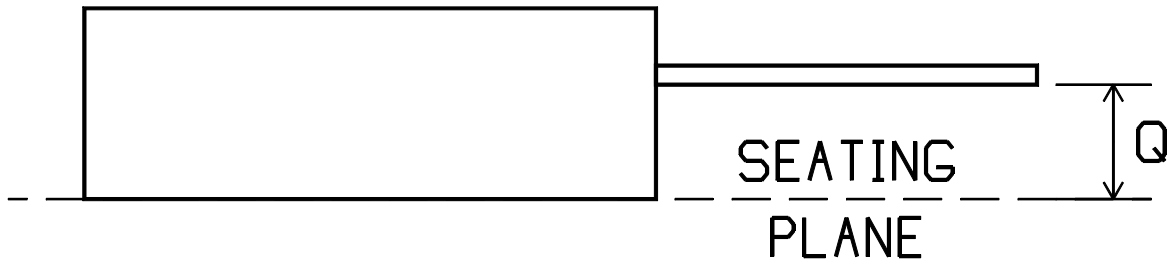
Lead lengths and diameters	**DAE009**
First-angle projection	Version 001, revision 01



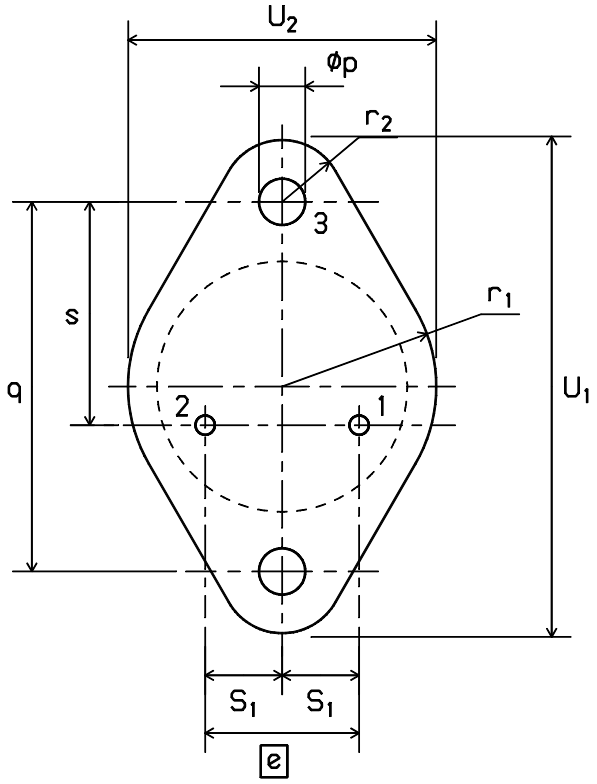
Terminal splay dimensions	**DAE012**
First-angle projection 	Version 001, revision 01



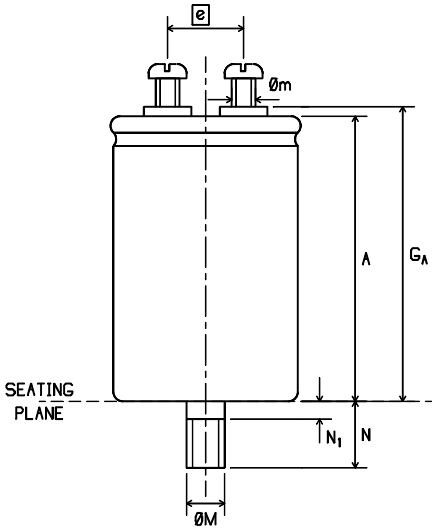
Package overall widths	**DAE021**
First-angle projection 	Version 001, revision 01

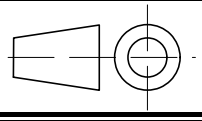


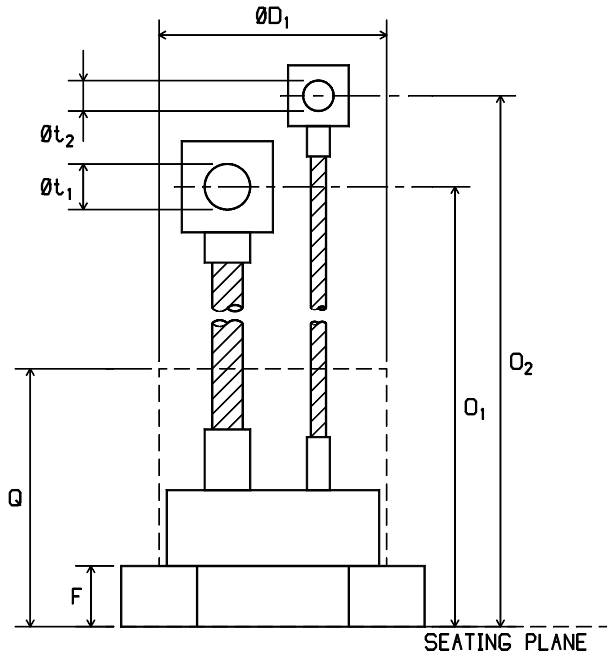
Terminal emergence height	**DAE040**
First-angle projection	Version 001, revision 01

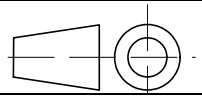


Oval flange-mount package dimensions	**DAE042**
First-angle projection	Version 001, revision 01



Cylindrical stud-mount package dimensions	**DAE092**
First-angle projection 	Version 001, revision 01



Dimensions of packages with tags	**DAE119**
First-angle projection 	Version 001, revision 01

Annex F
Index on keywords from the preferred name of Data element types and Condition data element types

keyword	full preferred name	identifier
2nd-order	2nd-order beat	AAE700-005
2-tau	spurious signal level (2-tau)	AAE888-005
3-state	3-state output leakage current	AAE239-005
3-state	3-state output leakage current	AAE240-005
3-tau	spurious signal level (3-tau)	AAE879-005
absolute	absolute value of admittance	AAF459-001
absolute	absolute value of impedance	AAF456-001
absorbing	energy absorbing capacity max	AAE430-005
accelerator	final accelerator voltage	AAE590-005
access	access time	AAE720-005
access	access time from address	AAJ091-001
access	access time from CAS	AAE721-005
access	access time from clock	AAJ092-001
access	access time from RAS	AAE720-005
access	access time from RAS	AAJ095-001
accessory	accessory name	AAF309-005
accessory	accessory type	AAF465-001
across-flats	across-flats dimension	AAG131-001
activated	activated display area current	AAE845-005
active	active element	AAJ036-001
actual	actual quantity of termination	AAG059-001
actual	actual terminal number	AAG059-001
actuating	actuating force	AAE932-005
actuating	actuating quantity	AAE926-005
actuation	switch actuation	AAE931-006
actuator	actuator type	AAE142-005
actuator	moving contact actuator type	AAE142-005
AD	AD function	AAE788-005
additional	additional features	AAJ071-001
additional	additional q-supply current	AAE897-005
additional	additional quiescent current	AAE897-005
address	access time from address	AAJ091-001
address	address bus width	AAF226-005
address	address hold time	AAJ099-001
address	address set-up time	AAJ098-001
address	address to output delay	AAE720-005
addressable	addressable storage size	AAF228-005
addressing	addressing mode	AAF326-005
adjustability	adjustability class	AAE070-005
adjustability	adjustability type	AAE003-006
adjustability	adjustability type	AAF151-005
adjustability	adjustability type	AAJ006-002
adjuster	adjuster placement	AAF371-001
adjustment	adjustment direction	AAJ017-001
admittance	absolute value of admittance	AAF459-001
admittance	modulus of admittance	AAF459-001
admittance	transfer admittance	AAE396-005
air	(air) gap length	AAE778-005
air	ambient temperature	AAE014-005
air	stress ambient free air temperature	AAF278-002
ambient	ambient temperature	AAE891-005
ambient	ambient temperature	AAE014-005
ambient	stress ambient free air temperature	AAF278-002
ambient	stress ambient temperature	AAF278-002
amplified	amplified quantity	AAF169-005
amplifier	amplifier package	AAE969-005
amplitude	amplitude permeability	AAE773-005
analogue	analogue function	AAE084-005
angle	angle axis to x-axis	AAF411-001

keyword	full preferred name	identifier
angle	angle axis to y-axis	AAF412-001
angle	angle axis to z-axis	AAF413-001
angle	angle of mechanical rotation	AAE173-005
angle	deflection angle	AAE588-005
angle	half-value beam angle	AAE558-005
angle	index angle	AAG130-001
angle	index datum angle	AAG047-001
angle	index datum angle	AAG048-001
angle	phase angle	AAF454-001
angle	phase angle	AAF455-001
angle	semi angle	AAF416-001
angle	step angle	AAE208-005
angle	tangent of loss angle	AAE065-005
angle	terminal seating angle	AAG052-001
angle	terminal-to-contact angle	AAE352-005
angle	viewing angle	AAE993-005
angular	angular terminal spacing	AAG049-001
angular	angular terminal spacing	AAG050-001
angular	angular terminal spread	AAG051-001
angular	angular travel	AAJ066-001
anode	anode current average	AAF203-005
anode	anode current peak	AAF204-005
anode	anode type	AAJ052-001
anode	anode voltage	AAE590-005
anode	anode voltage limiting	AAF315-005
anode	anode-gate to anode current	AAE749-005
anode	anode-gate to anode voltage	AAE751-005
anode	controllable anode current	AAE745-005
anode-gate	anode-gate to anode current	AAE749-005
anode-gate	anode-gate to anode voltage	AAE751-005
aperture	aperture	AAE362-005
application	application code	AAE606-005
application	application mode	AAE864-005
application	application type	AAJ016-001
application	circuit application (capacitor)	AAE034-005
application	delay line application	AAE542-005
application	diode application	AAE273-007
application	EHT stack application	AAE503-005
application	frequency application	AAE055-005
application	frequency application	AAF119-005
application	frequency application	AAF146-005
application	IC application field	AAE074-005
application	power transformer application	AAF098-005
application	PTC application	AAE618-005
application	rectifier diode application	AAE505-005
application	voltage application	AAE033-005
application	wire application	AAF262-005
approval	quality approval authority	AAE687-005
approval	safety approval	AAE149-005
architecture	instruction set architecture	AAF222-005
area	activated display area current	AAE845-005
area	effective cross-sectional area	AAE782-005
area	gross area	AAF398-001
area	minimum cross-sectional area	AAF283-005
area	net area	AAF397-001
area	viewing area height	AAE855-005
area	viewing area length	AAE854-005
armature	armature material	AAE176-005
arrangement	packing arrangement	AAF265-005
arrangement	pinning arrangement	AAE348-005
array	terminal array type	AAJ033-001
aspect	basic aspect	AAF352-001

keyword	full preferred name	identifier
assemblies	number of contact assemblies	AAE921-005
assembly	maximum assembly temperature	AAD149-001
assurance	quality assurance	AAE687-005
attenuation	attenuation	AAF261-005
attenuation	pass-band attenuation	AAF121-005
attenuation	transducer attenuation	AAE887-005
authority	quality approval authority	AAE687-005
avalanche	non-rep peak rev avalanche energy	AAE304-005
average	anode current average	AAF203-005
average	average bias current	AAF154-005
average	average forward current	AAE966-005
average	average noise factor	AAE647-005
average	average noise figure	AAE647-005
average	average on-state current	AAE744-005
average	average output current	AAE286-005
average	normal average value	AAF365-001
AWG	conductor size AWG	AAF244-005
axial	maximum axial force	AAE200-005
axis	angle axis to x-axis	AAF411-001
axis	angle axis to y-axis	AAF412-001
axis	angle axis to z-axis	AAF413-001
backlight	backlight	AAE989-005
backside	backside finish	AAD119-001
baffle	baffle hole breadth	AAE056-005
baffle	baffle hole length	AAE054-005
band	frequency band	AAE487-005
bandwidth	bandwidth	AAE534-005
bandwidth	bandwidth	AAE934-005
bandwidth	gain bandwidth	AAF167-005
bandwidth	gain bandwidth product	AAF167-005
bandwidth	spectral bandwidth	AAE557-005
bare/insulated	bare/insulated	AAF239-005
base	base current (dc)	AAE409-005
base	base type	AAE598-005
base	mounting base temperature	AAE336-005
base	mounting base temperature	AAE272-005
base-emitter	base-emitter resistance	AAE906-005
base-emitter	base-emitter saturation voltage	AAF114-005
base-emitter	base-emitter voltage	AAE427-005
base-emitter	difference base-emitter voltage	AAE418-005
basic	basic aspect	AAF352-001
beam	half-value beam angle	AAE558-005
beamwidth	beamwidth between 50 % values	AAE558-005
beat	2nd-order beat	AAE700-005
beat	composite triple beat	AAE699-005
bending	bending radius	AAF434-001
bent	bent terminal spacing	AAG091-001
bent	bent terminal spacing	AAG105-001
BH	BH product max	AAF295-005
bias	average bias current	AAF154-005
bias	input bias current	AAF154-005
bits	number of bits	AAE459-005
board	circuit board thickness	AAJ040-001
board	printed board thickness	AAE362-005
body	body breadth	AAE021-005
body	body diameter	AAF320-001
body	body height	AAE020-005
body	body length	AAE019-005
body	body shape	AAF344-001
body	body variant code	AAG055-001
body	contact body material	AAE355-005
body	maximum body temperature	AAE115-005
bond	number of bond sites	AAD018-001
bottom	bottom entry	AAE345-005
bounce	bounce time	AAE930-005

keyword	full preferred name	identifier
Br	temperature coefficient Br	AAF297-005
breadth	baffle hole breadth	AAE056-005
breadth	body breadth	AAE021-005
breadth	element breadth	AAE577-005
breadth	flange breadth	AAF318-001
breadth	terminal breadth	AAF338-001
breakback	breakback voltage	AAE726-005
breakdown	breakdown torque	AAE201-005
breakdown	breakdown voltage	AAF302-005
breakdown	breakdown voltage tolerance	AAJ083-001
breakdown	collector-emitter breakdown voltage	AAF066-005
breakdown	dc breakdown voltage	AAJ082-001
breakdown	minimum breakdown voltage	AAF251-005
breaking	rated breaking capacity	AAF122-005
breakover	breakover voltage	AAE725-005
brightness	brightness contrast ratio	AAE848-005
brush	brush life	AAE170-005
brush	brush life expectation	AAE171-005
BSI	shape/size code BSI	AAE259-005
built-in	built-in fuse	AAJ007-001
bulk	bulk material	AAD148-001
bump	bump height	AAD146-001
bump	bump height tolerance	AAD147-001
bump	bump material	AAD124-001
bump	bump size	AAD122-001
bumped	bumped height	AAD123-001
burst-mode	burst-mode cycle time	AAJ093-001
bus	address bus width	AAF226-005
bus	bus structure	AAF221-005
bus	data bus width	AAF227-005
bus	I/O bus width	AAF328-005
cable	cable configuration	AAF254-005
cable	LF cable element	AAF253-005
cable	MIL cable type	AAF252-005
cable	number of cable elements	AAF255-005
cable	RF cable element	AAF256-005
cable	slope cable equivalent	AAE705-005
cable/wire	cable/wire	AAF249-005
cap	dielectric class (ceramic cap)	AAE038-005
cap	temperature coefficient (cap)	AAE067-005
capacitance	capacitance	AAE046-005
capacitance	capacitance	AAF446-001
capacitance	capacitance	AAJ084-001
capacitance	capacitance	AAE957-005
capacitance	capacitance between conductors	AAF259-005
capacitance	capacitance change with temperature	AAJ057-001
capacitance	capacitance lower tolerance	AAE269-001
capacitance	capacitance lower tolerance (%)	AAE018-001
capacitance	capacitance ratio	AAE502-005
capacitance	capacitance tolerance	AAE071-005
capacitance	capacitance upper tolerance	AAE268-001
capacitance	capacitance upper tolerance (%)	AAE047-001
capacitance	coil-contact capacitance	AAE918-005
capacitance	collector capacitance	AAE420-005
capacitance	collector-base capacitance	AAF116-005
capacitance	contact capacitance	AAE919-005
capacitance	diode capacitance	AAE496-005
capacitance	diode capacitance	AAE497-005
capacitance	diode lower capacitance	AAF304-005
capacitance	diode upper capacitance	AAF303-005
capacitance	emitter-base input capacitance	AAF117-005
capacitance	feedback capacitance	AAE390-005
capacitance	feedback capacitance	AAE421-005
capacitance	input capacitance	AAE898-005
capacitance	input capacitance	AAE982-005

keyword	full preferred name	identifier
capacitance	input capacitance at gate	AAE655-005
capacitance	load capacitance	AAE256-005
capacitance	maximum capacitance	AAE068-005
capacitance	minimum capacitance	AAE069-005
capacitance	negative capacitance tolerance	AAF448-001
capacitance	output capacitance	AAE983-005
capacitance	positive capacitance tolerance	AAF449-001
capacitance	reference capacitance	AAE860-005
capacitance	short-circuit input capacitance	AAE982-005
capacitance	short-circuit output capacitance	AAE983-005
capacitance	specific capacitance	AAE990-005
capacitance	symmetric capacitance tolerance	AAF447-001
capacitance	toleranced capacitance	AAF462-001
capacitance	transfer capacitance	AAE390-005
capacitance	transfer capacitance	AAE421-005
capacitance	varistor capacitance	AAE429-005
capacitor	(capacitor) dielectric	AAE004-007
capacitor	circuit application (capacitor)	AAE034-005
capacitor	electrolytic capacitor type	AAJ001-001
capacitor	impedance of a capacitor	AAJ058-001
capacitor	time constant (of capacitor)	AAE066-005
capacitor	variable capacitor type	AAJ002-001
capacity	energy absorbing capacity max	AAE430-005
capacity	heat capacity	AAE135-005
capacity	nominal capacity	AAE530-005
capacity	power handling capacity	AAE048-005
capacity	rated breaking capacity	AAF122-005
capacity	storage capacity	AAE474-005
capacity	voltage handling capacity	AAE338-005
card	card thickness	AAJ040-001
carrier	carrier storage time	AAF055-005
CAS	access time from CAS	AAE721-005
case	case size	AAF388-001
case	case temperature	AAE260-005
category	category EE component	AAE002-006
category	category EM component	AAE060-005
category	category of diode device	AAF305-005
category	category temperature	AAE891-005
category	category temperature	AAJ056-001
category	category voltage	AAJ053-001
category	climatic category	AAE010-005
category	U/I category	AAE509-005
cathode	cathode voltage	AAE591-005
cathode	cathode voltage for cut-off	AAE591-005
cathode	cathode voltage for cut-off	AAE603-005
cathode	cathode-gate to cathode current	AAE748-005
cathode-gate	cathode-gate to cathode current	AAE748-005
cathode-gate	cathode-gate trigger voltage	AAE750-005
CECC	CECC specification	AAE347-005
cells	number of cells in series	AAE940-005
centre	centre frequency	AAE527-005
centre	centre of gravity (x-axis)	AAF362-001
centre	centre of gravity (y-axis)	AAF363-001
centre	centre pole diameter	AAE051-005
centre	die centre x-position	AAD129-001
centre	die centre y-position	AAD130-001
centre	x-coordinate of centre	AAF418-001
centre	y-coordinate of centre	AAF419-001
centre	z-coordinate of centre	AAF420-001
ceramic	dielectric class (ceramic cap)	AAE038-005
certification	quality certification	AAE687-005
change	capacitance change with temperature	AAJ057-001
change	differential current change	AAE642-005
change	differential voltage change	AAE644-005
change	max change rate output voltage	AAF162-005
change	rate change of forward current	AAE275-005
channel	channel type	AAE366-005
character	character height	AAE851-005
character	character length	AAE850-005
characteristic	characteristic impedance	AAF260-005
characteristic	EIA temperature characteristic	AAE037-005
characteristic	input/output characteristic	AAE787-005
charge	charge time	AAE943-005
charge	number of charge cycles	AAE944-005
charge	voltage during charge	AAE941-005
chargeability	chargeability type	AAE510-005
chip	standby current chip disabled	AAF336-005
chopping	chopping frequency	AAE935-005
chromaticity	chromaticity	AAF202-005
circle	pitch circle diameter	AAF337-001
circle	terminal circle diameter	AAG004-001
circuit	circuit application (capacitor)	AAE034-005
circuit	circuit board thickness	AAJ040-001
clamping	clamping voltage	AAE313-005
clamping	input clamping current	AAE217-005
clamping	maximum clamping voltage	AAE319-005
clamping	output clamping current	AAE218-005
class	adjustability class	AAE070-005
class	coercivity class	AAE759-005
class	dielectric class (ceramic cap)	AAE038-005
class	IEC reference class	AAE000-001
class	luminous intensity class	AAE562-005
class	main class of component	AAE001-005
class	performance class	AAE357-005
class	safety class	AAE036-005
class	sealing class	AAJ018-001
class	voltage at class current (IEC)	AAE319-005
clearance	clearance	AAG002-001
clearance	clearance to earth	AAE158-005
climatic	climatic category	AAE010-005
clock	access time from clock	AAJ092-001
clock	clock frequency	AAF224-005
clock	clock frequency	AAJ096-001
clock	clock hold time	AAJ103-001
clock	clock set-up time	AAJ102-001
clock	internal clock frequency	AAF225-005
clock	maximum clock frequency	AAF211-005
clock	number of clock periods	AAF223-005
code	application code	AAE606-005
code	body variant code	AAG055-001
code	colour code	AAF250-005
code	connection requirement code	AAD006-001
code	connect-node code	AAF391-001
code	core size code	AAE765-005
code	die test level code	AAD008-001
code	die type code	AAD004-001
code	die yield code	AAD095-001
code	drawing reference code	AAG066-001
code	drawing sequence code	AAG104-001
code	envelope code	AAE838-005
code	IC package code	AAE838-005
code	IEC 60191 code	AAG061-001
code	lead form code	AAG058-001
code	manufacturer package code	AAG069-001
code	mounting-cap code	AAE522-005
code	package identifier code	AAG060-001
code	package style code	AAG057-001
code	phosphor code	AAE605-005

keyword	full preferred name	identifier
code	project view code	AAF392-001
code	shape/size code BSI	AAE259-005
code	size code	AAJ008-001
code	size code EIA	AAF353-001
code	standard package code	AAG070-001
code	supply form code	AAD056-001
code	supply packing code	AAD055-001
code	temperature coefficient code	AAE035-005
code	terminal position code	AAG056-001
code	terminal shape code	AAG058-001
code	terminal variant code	AAG054-001
code	test maturity code	AAD154-001
code	test reliability code	AAD153-001
codes	swap codes	AAD023-001
coef	temp coef input offset current	AAF153-005
coef	temp coef input offset voltage	AAF156-005
coefficient	temperature coefficient	AAE113-005
coefficient	temperature coefficient	AAE876-005
coefficient	temperature coefficient	AAF350-001
coefficient	temperature coefficient (cap)	AAE067-005
coefficient	temperature coefficient Br	AAF297-005
coefficient	temperature coefficient code	AAE035-005
coefficient	temperature coefficient H_cJ	AAF291-005
coefficient	temperature coefficient S_F	AAE329-005
coefficient	temperature coefficient S_Z	AAE322-005
coefficient	test voltage coefficient	AAF369-001
coercivity	coercivity class	AAE759-005
coercivity	coercivity H_cB	AAF287-005
coercivity	coercivity H_cJ	AAF288-005
coil	coil connection	AAE175-005
coil	field coil inductance	AAE608-005
coil	field coil resistance	AAE610-005
coil	line coil inductance	AAE607-005
coil	line coil resistance	AAE609-005
coil-contact	coil-contact capacitance	AAE918-005
coils	number of primary coils	AAF048-005
coils	number of secondary coils	AAF099-005
collector	collector capacitance	AAE420-005
collector	collector current (dc)	AAE406-005
collector	collector current (dc) max	AAE405-005
collector	collector current light	AAF138-005
collector	collector current light	AAF140-005
collector	collector current peak value	AAE407-005
collector	collector current ratio	AAE640-005
collector	collector cut-off current dark	AAF139-005
collector	collector cut-off current I_CB	AAF109-005
collector	collector cut-off current I_CE	AAF115-005
collector	collector saturation current	AAE641-005
collector-base	collector-base capacitance	AAF116-005
collector-base	collector-base voltage	AAE419-005
collector-base	collector-base voltage V_CBO	AAE417-005
collector-emitter	collector-emitter breakdown voltage	AAF066-005
collector-emitter	collector-emitter peak voltage	AAE415-005
collector-emitter	collector-emitter sat voltage	AAE416-005
collector-emitter	collector-emitter sat voltage	AAE551-005
collector-emitter	collector-emitter voltage	AAE412-005
collector-emitter	collector-emitter voltage V_CE	AAE413-005
collector-emitter	collector-emitter voltage V_CE	AAE414-005
collector-emitter	collector-emitter voltage V_CE	AAF113-005
colour	colour code	AAF250-005
colour	colour temperature	AAE623-005
colour	colour TV transmission	AAE442-005
colour	envelope colour	AAE560-005
colour	envelope colour	AAF128-005
colour	LED light colour	AAE564-005
colour	light colour	AAE564-005
colour	package colour	AAE560-005
colour	package colour	AAF128-005
column	column type	AAF437-001
columns	number of columns	AAF437-001
comb	comb depth	AAF120-005
common-mode	common-mode input resistance	AAF164-005
common-mode	common-mode input voltage	AAF157-005
common-mode	common-mode input voltage range	AAF157-005
common-mode	common-mode rejection ratio	AAE374-005
common-mode	common-mode rejection ratio	AAF160-005
commut	rate of rise of commut current	AAE735-005
commutated	commutated turn-off time	AAE747-005
commutating	rate of rise commutating voltage	AAE741-005
compatibility	interface compatibility	AAF323-005
complementary	complementary type	AAE968-005
complex	complex numbers	AAF441-001
component	category EE component	AAE002-006
component	category EM component	AAE060-005
component	component description	AAE834-005
component	component status	AAE965-005
component	dc voltage component	AAE843-005
component	fibre optic component	AAJ048-001
component	integrated component	AAE177-005
component	integrated component	AAF124-005
component	main class of component	AAE001-005
composite	composite triple beat	AAE699-005
concentric	concentric plug/jack type	AAJ025-001
conditions	reference conditions	AAE995-005
conductance	conductance	AAF460-001
conductance	transfer conductance	AAE656-005
conductive	conductive material	AAF241-005
conductor	conductor configuration	AAF243-005
conductor	conductor diameter	AAF246-005
conductor	conductor finish	AAF240-005
conductor	conductor shape	AAF242-006
conductor	conductor size AWG	AAF244-005
conductors	capacitance between conductors	AAF259-005
cone	cone height	AAF415-001
cone	cone radius	AAF414-001
configuration	cable configuration	AAF254-005
configuration	conductor configuration	AAF243-005
configuration	diode configuration	AAE488-005
configuration	input configuration	AAF191-005
configuration	winding configuration	AAE151-005
conformity	conformity level	AAD137-001
conformity	conformity of frequency response	AAE706-005
connecting	connecting style	AAJ038-001
connection	coil connection	AAE175-005
connection	connection method	AAE985-005
connection	connection requirement	AAD091-001
connection	connection requirement code	AAD006-001
connection	substrate connection	AAD007-001
connection	substrate connection	AAD093-001
connection	terminal connection type	AAF435-001
connect-node	connect-node code	AAF391-001
connector	connector diameter	AAJ044-001
connector	connector opening	AAE362-005
connector	connector rated current	AAJ043-001
connector	connector rated voltage	AAJ042-001
connector	connector shape	AAE356-005
connector	connector type	AAE349-006
connector	PCB connector type	AAJ022-001
constant	hysteresis material constant	AAF306-005
constant	mechanical time constant	AAE187-005
constant	thermal time constant	AAE131-005

keyword	full preferred name	identifier
constant	time constant	AAE746-005
constant	time constant (of capacitor)	AAE066-005
construction	dielectric construction	AAF257-005
construction	display construction	AAE849-005
construction	layout construction	AAE849-005
consumption	current consumption	AAE697-005
consumption	power consumption	AAE987-005
consumption	power consumption	AAJ063-001
consumption	specific current consumption	AAE845-005
contact	contact body material	AAE355-005
contact	contact capacitance	AAE919-005
contact	contact current (ac)	AAE515-005
contact	contact current (dc)	AAF106-005
contact	contact current max	AAE358-005
contact	contact finish	AAE350-005
contact	contact length under housing	AAE363-005
contact	contact member force	AAE925-005
contact	contact pitch	AAJ039-001
contact	contact positions	AAE359-005
contact	contact power (ac)	AAE928-005
contact	contact power (dc)	AAF130-005
contact	contact resistance	AAE920-005
contact	contact sex	AAE353-005
contact	contact spring material	AAF125-005
contact	contact type	AAJ023-001
contact	contact voltage (ac)	AAE512-005
contact	contact voltage (dc)	AAF107-005
contact	limiting contact voltage	AAE513-005
contact	moving contact actuator type	AAE142-005
contact	number of contact assemblies	AAE921-005
contact-circuit	contact-circuit resistance	AAE920-005
contacts	number of contacts	AAE359-005
contacts	number of contacts per row	AAF150-005
contacts	sex of contacts	AAE353-005
continuous	continuous direct reverse current	AAE276-005
continuous	continuous overload	AAE168-005
continuous	leakage current continuous	AAE043-005
contrast	brightness contrast ratio	AAE848-005
contrast	contrast ratio	AAE848-005
contrast	luminance contrast ratio	AAE848-005
control	control grid voltage	AAE578-005
control	mode of control	AAE464-005
controllable	controllable anode current	AAE745-005
conventional	nearest conventional type	AAE494-005
coordinate	vertex x-coordinate	AAD029-001
coordinate	vertex y-coordinate	AAD030-001
core	core diameter	AAE051-005
core	core factor C_1	AAE777-005
core	core inductance parameter	AAE777-005
core	core shape	AAE766-005
core	core size code	AAE765-005
count	pad geometry count	AAD116-001
count	terminal count	AAD145-001
count	termination count sequence	AAG072-001
coupling	coupling method	AAF192-005
coupling	coupling style	AAJ038-001
creation	date of creation of record	AAG074-001
creator	identification of creator	AAG075-001
creepage	creepage distance	AAE159-005
crest	crest working input voltage	AAE292-005
crest	crest working reverse voltage	AAE299-005
cross	cross modulation	AAE703-005
cross-section	cross-section	AAF247-005
cross-section	terminal cross-section shape	AAF376-001
cross-sectional	effective cross-sectional area	AAE782-005
cross-sectional	minimum cross-sectional area	AAF283-005

keyword	full preferred name	identifier
crystal	LED crystal material	AAE563-005
CSI	CSI functions	AAE790-005
Curie	Curie point	AAE761-005
Curie	Curie temperature	AAE761-005
current	3-state output leakage current	AAE239-005
current	3-state output leakage current	AAE240-005
current	activated display area current	AAE845-005
current	additional q-supply current	AAE897-005
current	additional quiescent current	AAE897-005
current	anode current average	AAF203-005
current	anode current peak	AAF204-005
current	anode-gate to anode current	AAE749-005
current	average bias current	AAF154-005
current	average forward current	AAE966-005
current	average on-state current	AAE744-005
current	average output current	AAE286-005
current	base current (dc)	AAE409-005
current	cathode-gate to cathode current	AAE748-005
current	collector current (dc)	AAE406-005
current	collector current (dc) max	AAE405-005
current	collector current light	AAF138-005
current	collector current light	AAF140-005
current	collector current peak value	AAE407-005
current	collector current ratio	AAE640-005
current	collector cut-off current dark	AAF139-005
current	collector cut-off current I_CB	AAF109-005
current	collector cut-off current I_CE	AAF115-005
current	collector saturation current	AAE641-005
current	connector rated current	AAJ043-001
current	contact current (ac)	AAE515-005
current	contact current (dc)	AAF106-005
current	contact current max	AAE358-005
current	continuous direct reverse current	AAE276-005
current	controllable anode current	AAE745-005
current	current (ac)	AAE933-005
current	current (dc)	AAE945-005
current	current (pulse)	AAE125-005
current	current consumption	AAE697-005
current	current dc	AAF103-005
current	current per phase	AAE203-005
current	current rms	AAE540-005
current	current transfer ratio	AAE548-005
current	cut-off current dark I_CBO	AAF142-005
current	cut-off current dark I_CEO	AAF141-005
current	data retention current	AAF332-005
current	dc current gain	AAE402-005
current	dc current gain sat	AAE952-005
current	dc input diode current	AAE217-005
current	dc output diode current	AAE218-005
current	dc supply current	AAE691-005
current	differential current change	AAE642-005
current	drain current (dc)	AAE368-005
current	drain current (dc)	AAE370-005
current	drain current (dc)	AAE367-005
current	drain cut-off current	AAE371-005
current	dynamic output current	AAF207-005
current	emitter current (dc)	AAE408-005
current	emitter cut-off current I_EBO	AAF110-005
current	energising current (ac)	AAE912-005
current	energising current (dc)	AAE911-005
current	field deflection current	AAE612-005
current	forward current	AAE274-005
current	forward current limit	AAE546-005
current	gate current	AAE731-005
current	gate cut-off current	AAE372-005
current	gate trigger current	AAE732-005
current	heater current	AAE580-005

keyword	full preferred name	identifier
current	HIGH off-state output current	AAE239-005
current	HIGH-level input current	AAE899-005
current	HIGH-level output current	AAE255-005
current	HIGH-state input current	AAE899-005
current	HIGH-state output current	AAE255-005
current	HIGH-state supply current	AAE901-005
current	holding current	AAF136-005
current	input bias current	AAF154-005
current	input clamping current	AAE217-005
current	input current	AAE895-005
current	input current limit	AAE217-005
current	input leakage current	AAE223-005
current	input offset current	AAF152-005
current	latching current	AAF137-005
current	leakage current continuous	AAE043-005
current	leakage current short-term	AAE042-005
current	line deflection current	AAE611-005
current	LOW off-state output current	AAE240-005
current	LOW-level input current	AAE900-005
current	LOW-level output current	AAE254-005
current	LOW-state input current	AAE900-005
current	LOW-state output current	AAE254-005
current	LOW-state supply current	AAE902-005
current	maximum current	AAJ062-001
current	maximum output current	AAE168-005
current	nominal current	AAE521-005
current	nominal output current	AAE160-005
current	non-rep peak input current limit	AAE285-005
current	non-rep peak on-state current	AAE730-005
current	non-rep peak reverse current	AAE315-005
current	non-rep varistor peak current	AAE298-005
current	non-repetitive peak forward current	AAE294-005
current	non-repetitive peak reverse current	AAE318-005
current	non-repetitive surge current	AAE298-005
current	non-repetitive transient current	AAE298-005
current	non-trip current	AAE137-005
current	off-state current	AAE239-005
current	off-state current	AAE240-005
current	off-state current	AAF135-005
current	off-state supply current	AAE903-005
current	on-state current	AAE733-005
current	output clamping current	AAE218-005
current	output current	AAE867-005
current	output current	AAE226-005
current	output current EHT supply	AAE282-005
current	output current focus supply	AAE283-005
current	output current limit	AAE218-005
current	output short-circuit current	AAF207-005
current	output sink current	AAE254-005
current	output source current	AAE255-005
current	pad current	AAD033-001
current	pad supply current	AAD033-001
current	peak inrush current limit	AAE284-005
current	peak working current	AAE317-005
current	programming current	AAF237-005
current	PTC peak current	AAE620-005
current	PTC peak inrush current	AAE619-005
current	PTC residual current	AAE629-005
current	quiescent current	AAE896-005
current	quiescent supply current	AAE896-005
current	rate change of forward current	AAE275-005
current	rate of rise of commut current	AAE735-005
current	rate of rise of gate current	AAE736-005
current	rate of rise of on-state curr	AAE684-005
current	rate of rise on-state current	AAE734-005

keyword	full preferred name	identifier
current	rated current	AAE525-005
current	rated input current	AAE197-005
current	rated operational current (dc)	AAF106-005
current	repetitive peak forward current	AAE293-005
current	repetitive peak on-state current	AAE729-005
current	repetitive peak output current	AAE287-005
current	repetitive peak recovery current	AAE297-005
current	repetitive peak reverse current	AAE297-005
current	reverse current	AAE276-005
current	reverse current	AAE994-005
current	reverse current dark	AAF144-005
current	reverse current light	AAF143-005
current	reverse gate current	AAE372-005
current	ripple current	AAE960-005
current	rms on-state current	AAE728-005
current	rms on-state current	AAF063-005
current	small-signal current gain	AAE410-005
current	source cut-off current	AAE373-005
current	specific current consumption	AAE845-005
current	standby current	AAF336-005
current	standby current chip disabled	AAF336-005
current	standby current disabled	AAE692-005
current	standby current enabled	AAE693-005
current	supply current	AAD054-001
current	supply current	AAE691-005
current	supply current	AAE901-005
current	supply current	AAE902-005
current	supply current	AAE903-005
current	supply current type	AAE178-005
current	surge current	AAJ086-001
current	surge on-state current	AAE730-005
current	temp coef input offset current	AAF153-005
current	thermistor current	AAE625-005
current	trip current	AAE136-005
current	voltage at class current (IEC)	AAE319-005
current	working current	AAE316-005
current	working current	AAE500-005
current	working peak forward current	AAE296-005
current-noise	current-noise index	AAE621-005
curvature	screen curvature radius	AAE804-005
curve	curve radius	AAG043-001
cut-off	cathode voltage for cut-off	AAE591-005
cut-off	cathode voltage for cut-off	AAE603-005
cut-off	collector cut-off current dark	AAF139-005
cut-off	collector cut-off current I_CB	AAF109-005
cut-off	collector cut-off current I_CE	AAF115-005
cut-off	cut-off current dark I_CBO	AAF142-005
cut-off	cut-off current dark I_CEO	AAF141-005
cut-off	cut-off frequency	AAE426-005
cut-off	drain cut-off current	AAE371-005
cut-off	emitter cut-off current I_EBO	AAF110-005
cut-off	gate cut-off current	AAE372-005
cut-off	gate-source cut-off voltage	AAE386-005
cut-off	grid 1 voltage for cut-off	AAE578-005
cut-off	grid 2 voltage for cut-off	AAE584-005
cut-off	source cut-off current	AAE373-005
cycle	burst-mode cycle time	AAJ093-001
cycle	cycle life	AAE944-005
cycle	machine cycle	AAF223-005
cycle	random read/write cycle time	AAJ094-001
cycles	number of charge cycles	AAE944-005
cylinder	cylinder height	AAF410-001
cylinder	cylinder radius	AAF409-001
dark	collector cut-off current dark	AAF139-005
dark	cut-off current dark I_CBO	AAF142-005
dark	cut-off current dark I_CEO	AAF141-005
dark	dark resistance	AAE123-005

keyword	full preferred name	identifier
dark	reverse current dark	AAF144-005
data	data bus width	AAF227-005
data	data retention current	AAF332-005
data	data retention voltage	AAF333-005
data	die data source	AAD142-001
data-valid	output data-valid time	AAF232-005
date	date of creation of record	AAG074-001
datum	index datum angle	AAG047-001
datum	index datum angle	AAG048-001
decrease	impedance decrease	AAE756-005
defect	defect rate	AAD131-001
deflection	deflection angle	AAE588-005
deflection	field deflection current	AAE612-005
deflection	line deflection current	AAE611-005
delay	address to output delay	AAE720-005
delay	delay (off) time	AAE981-005
delay	delay (off) time	AAF055-005
delay	delay (on) time	AAE980-005
delay	delay (on) time	AAF056-005
delay	delay line application	AAE542-005
delay	delay line type	AAE878-005
delay	delay time	AAE231-005
delay	delay time	AAE543-005
delay	delay time	AAF056-005
delay	HIGH to LOW delay time	AAE233-005
delay	LOW to HIGH delay time	AAE237-005
delay	phase delay drift	AAE886-005
delay	phase delay time	AAE544-005
delay	propagation delay	AAE231-005
delivery	MPD delivery form	AAD155-001
delta	delta I_CC per input	AAE897-005
density	density	AAF286-005
density	flux density at (BH)_max	AAF293-005
density	magnetic flux density	AAE769-005
density	peak flux density	AAE768-005
density	remanent flux density	AAF292-005
density	saturation flux density	AAF308-005
density	total loss volume density	AAF300-005
dependency	resistance dependency	AAE122-005
depth	comb depth	AAF120-005
depth	index depth	AAG026-001
derating	dissipation derating factor	AAE905-005
description	component description	AAE834-005
description	die description	AAD010-001
description	die type description	AAD086-001
description	supply form description	AAD088-001
description	supply packing description	AAD090-001
description	test procedure description	AAD060-001
deviation	mounting deviation y/x	AAF405-001
deviation	mounting deviation y/z	AAF404-001
deviation	normal standard deviation	AAF366-001
device	category of diode device	AAF305-005
device	image pickup device type	AAJ074-001
device	locking device	AAF051-005
device	optoelectronic device function	AAE545-006
device	trigger device function	AAE724-005
diagonal	screen diagonal	AAE592-005
diameter	body diameter	AAF320-001
diameter	centre pole diameter	AAE051-005
diameter	conductor diameter	AAF246-005
diameter	connector diameter	AAJ044-001
diameter	core diameter	AAE051-005
diameter	flange diameter	AAF342-001
diameter	inside diameter	AAE753-005
diameter	lead diameter	AAG009-001
diameter	lead diameter	AAG010-001
diameter	lead diameter	AAG011-001
diameter	mounting hole diameter	AAG039-001
diameter	neck diameter	AAE589-005

keyword	full preferred name	identifier
diameter	outside diameter	AAE022-005
diameter	overall diameter	AAG025-001
diameter	package diameter	AAG014-001
diameter	package diameter	AAG062-001
diameter	package diameter	AAG116-001
diameter	package diameter zone	AAG022-001
diameter	pad diameter	AAD121-001
diameter	pitch circle diameter	AAF337-001
diameter	shaft diameter	AAJ070-001
diameter	slug diameter	AAG102-001
diameter	spindle diameter	AAE148-005
diameter	stand-off diameter	AAG007-001
diameter	stud thread diameter	AAG093-002
diameter	tag hole diameter	AAG118-001
diameter	tag hole diameter	AAG119-001
diameter	tag hole diameter	AAG120-001
diameter	terminal circle diameter	AAG004-001
diameter	terminal diameter	AAE023-005
diameter	terminal diameter	AAG009-001
diameter	terminal diameter	AAG010-001
diameter	terminal diameter	AAG011-001
diameter	terminal thread diameter	AAG094-002
die	die centre x-position	AAD129-001
die	die centre y-position	AAD130-001
die	die data source	AAD142-001
die	die description	AAD010-001
die	die identifier	AAD001-001
die	die length	AAD070-001
die	die manufacturer	AAD140-001
die	die name	AAD002-001
die	die picture	AAD127-001
die	die step dimension x	AAD070-001
die	die step dimension y	AAD071-001
die	die supplier	AAD141-001
die	die surface	AAD081-001
die	die test level code	AAD008-001
die	die thickness	AAD072-001
die	die type	AAD085-001
die	die type code	AAD004-001
die	die type description	AAD086-001
die	die version	AAD003-001
die	die width	AAD071-001
die	die yield	AAD009-001
die	die yield code	AAD095-001
dielectric	(capacitor) dielectric	AAE004-007
dielectric	dielectric class (ceramic cap)	AAE038-005
dielectric	dielectric construction	AAF257-005
dielectric	dielectric material type	AAE004-007
dielectric	dielectric strength	AAF251-005
dielectric	dielectric sub-class 1	AAE266-005
dielectric	dielectric sub-class 2	AAE076-005
dielectric	film dielectric material	AAE039-005
difference	difference base-emitter voltage	AAE418-005
difference	difference in penetration factor	AAE716-005
difference	difference in transfer impedance	AAE717-005
difference	gate-source voltage difference	AAE383-005
differential	differential current change	AAE642-005
differential	differential input resistance	AAF163-005
differential	differential resistance	AAE323-005
differential	differential resistance	AAE328-005
differential	differential travel	AAE869-005
differential	differential voltage change	AAE644-005
digit	digit height	AAE984-005
digit	digit length	AAF145-005
digital	digital function	AAE085-005
dimension	across-flats dimension	AAG131-001
dimension	die step dimension x	AAD070-001

keyword	full preferred name	identifier
dimension	die step dimension y	AAD071-001
dimension	stand-off major dimension	AAG005-001
dimension	stand-off minor dimension	AAG006-001
dimension	terminal emergence dimension	AAG041-001
diode	category of diode device	AAF305-005
diode	dc input diode current	AAE217-005
diode	dc output diode current	AAE218-005
diode	diode application	AAE273-007
diode	diode capacitance	AAE496-005
diode	diode capacitance	AAE497-005
diode	diode configuration	AAE488-005
diode	diode envelope	AAE331-005
diode	diode forward resistance	AAE310-005
diode	diode function	AAE312-005
diode	diode lower capacitance	AAF304-005
diode	diode package	AAE331-005
diode	diode reverse resistance	AAE311-005
diode	diode series resistance	AAE310-005
diode	diode series resistance	AAE311-005
diode	diode technology	AAE489-005
diode	diode upper capacitance	AAF303-005
diode	rectifier diode application	AAE505-005
direct	continuous direct reverse current	AAE276-005
direction	adjustment direction	AAJ017-001
direction	direction of insertion	AAJ045-001
direction	direction of rotation	AAE188-005
direction	input/output direction	AAD022-001
direction	preferred viewing direction	AAE991-005
direction	signal direction	AAD022-001
disable	output disable time	AAF215-005
disabled	standby current chip disabled	AAF336-005
disabled	standby current disabled	AAE692-005
disaccommodation	disaccommodation factor	AAF299-005
display	activated display area current	AAE845-005
display	display construction	AAE849-005
display	display format	AAF273-005
diss	non-rep peak reverse power diss	AAE303-006
diss	non-rep peak reverse power diss	AAE327-006
diss	non-rep peak reverse power diss	AAF389-001
dissipation	dissipation derating factor	AAE905-005
dissipation	dissipation factor	AAE065-005
dissipation	dissipation factor	AAE130-005
dissipation	dissipation factor	AAJ035-001
dissipation	power dissipation	AAE257-005
dissipation	power dissipation per output	AAE214-005
dissipation/output	dc power dissipation/output	AAE214-005
distance	creepage distance	AAE159-005
distance	hysteresis in switching distance	AAE869-005
distance	spark distance	AAE158-005
distance	tag hole distance	AAG121-001
distance	tag hole distance	AAG122-001
distance	tag hole distance	AAG123-001
distance	tie-point distance	AAE937-005
distance	travel in switching distance	AAE869-005
distortion	intermod distortion d_3	AAE710-005
distortion	intermod distortion d_im	AAE709-005
distortion	intermodulation distortion d_3	AAE712-005
distortion	intermodulation distortion d_im	AAE711-005
distribution	probability distribution	AAF364-001
document	source document identification	AAG067-001
document	source document page	AAG068-001
document	standards document	AAG071-001

keyword	full preferred name	identifier
	reference	
dot	dot height	AAE853-005
dot	dot length	AAE852-005
dot	dot spacing	AAE986-005
drain	drain current (dc)	AAE368-005
drain	drain current (dc)	AAE370-005
drain	drain current (dc)	AAE367-005
drain	drain cut-off current	AAE371-005
drain-gate	drain-gate voltage	AAE375-005
drain-source	drain-source off-state resistance	AAE394-005
drain-source	drain-source on-state resistance	AAE391-005
drain-source	drain-source on-state resistance	AAE393-005
drain-source	drain-source voltage	AAE376-005
drain-source	drain-source voltage limit	AAE377-005
drain-substrate	drain-substrate voltage	AAE378-005
drain-substrate	drain-substrate voltage limit	AAE379-005
drawing	drawing reference code	AAG066-001
drawing	drawing sequence code	AAG104-001
drawing	drawing suffix	AAG104-001
drift	phase delay drift	AAE886-005
drift	thermal drift gate-source voltage	AAE389-005
drive	drive frequency	AAE844-005
drive	drive unit type	AAE005-006
drive	drive voltage	AAE992-005
drive	driving method	AAF264-005
drive	operating voltage	AAE842-005
driving	driving feature	AAF014-005
driving	driving method	AAE839-005
driving	driving method	AAF264-005
driving	driving mode	AAE839-005
driving	driving voltage	AAE184-005
drop	voltage drop	AAF123-005
duration	duration	AAE028-005
duration	pulse duration HIGH	AAF216-005
duration	pulse duration LOW	AAF217-005
during	voltage during charge	AAE941-005
dynamic	dynamic output current	AAF207-005
E	E series	AAE030-005
earth	clearance to earth	AAE158-005
edge	major edge	AAF426-001
edge	minor edge	AAF427-001
edge-length	edge-length	AAF429-001
EE	category EE component	AAE002-006
effective	effective cross-sectional area	AAE782-005
effective	effective frequency f_e1	AAE341-005
effective	effective frequency f_e2	AAE340-005
effective	effective magnetic path length	AAE776-005
effective	effective permeability	AAE771-005
efficiency	efficiency	AAE715-005
EHT	EHT stack application	AAE503-005
EHT	output current EHT supply	AAE282-005
EHT	output voltage EHT supply	AAE289-005
EIA	EIA temperature characteristic	AAE037-005
EIA	size code EIA	AAF353-001
electrical	electrical reference	AAD021-001
electrochemical	primary electrochemical system	AAE531-005
electrochemical	secondary electrochemical system	AAE532-005
electrode	electrode material type	AAE040-005
electrode	electrode technology	AAE031-005
electrolyte	electrolyte type	AAJ051-001
electrolytic	electrolytic capacitor type	AAJ001-001
electromotive	electromotive force	AAE180-005
element	active element	AAJ036-001

keyword	full preferred name	identifier
element	element breadth	AAE577-005
element	element gap	AAE575-005
element	element length	AAE576-005
element	element separation	AAE575-005
element	LF cable element	AAF253-005
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element	limiting element voltage (dc)	AAE118-005
element	resistance element material	AAE116-005
element	RF cable element	AAF256-005
elements	number of cable elements	AAF255-005
elements	number of variable elements	AAE172-005
EM	category EM component	AAE060-005
emergence	terminal emergence dimension	AAG041-001
emergence	terminal emergence height	AAG040-001
emission	wavelength at peak emission	AAE556-005
emitter	emitter current (dc)	AAE408-005
emitter	emitter cut-off current I_EBO	AAF110-005
emitter-base	emitter-base input capacitance	AAF117-005
emitter-base	emitter-base voltage V_EBO	AAF112-005
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enabled	standby current enabled	AAE693-005
encapsulation	encapsulation material	AAD150-001
encapsulation	encapsulation technology	AAE262-005
endurance	endurance	AAE073-005
endurance	mechanical endurance	AAE361-005
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energising	energising current (dc)	AAE911-005
energising	energising voltage (ac)	AAE916-005
energising	energising voltage (dc)	AAE915-005
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energy	non-rep peak rev avalanche energy	AAE304-005
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entry	female entry	AAE345-005
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envelope	envelope	AAE637-005
envelope	envelope	AAE816-005
envelope	envelope	AAE969-005
envelope	envelope code	AAE838-005
envelope	envelope colour	AAE560-005
envelope	envelope colour	AAF128-005
envelope	peak envelope power	AAE708-005
envelope	peak envelope power PEP	AAE707-005
equivalent	equivalent input noise voltage	AAE380-005
equivalent	equivalent noise irradiation	AAE572-005
equivalent	equivalent noise voltage	AAE380-005
equivalent	equivalent series resistance	AAE064-005
equivalent	noise equivalent power	AAE572-005
equivalent	slope cable equivalent	AAE705-005
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factor	disaccommodation factor	AAF299-005
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FET-technology	FET-technology	AAE973-005
fibre	fibre optic component	AAJ048-001
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fiducial	fiducial height	AAD159-001
fiducial	fiducial name	AAD156-001
fiducial	fiducial orientation	AAD162-001
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figure	noise figure	AAE657-005
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figure	spot noise figure	AAE657-005
file	fiducial file name	AAD157-001
film	film dielectric material	AAE039-005
filter	filter	AAE343-005
filter	filter type	AAJ059-001
final	final accelerator voltage	AAE590-005
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finish	conductor finish	AAF240-005
finish	contact finish	AAE350-005
fixed	linearity of a fixed resistor	AAE114-007
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flange	flange breadth	AAF318-001
flange	flange diameter	AAF342-001
flange	flange height	AAF319-001
flange	flange height	AAG019-001
flange	flange length	AAF317-001
Flange	Flange length	AAG063-001
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flange	flange overall width	AAG086-001
flange	flange thickness	AAG019-001
flange	flange width	AAG114-001
flange	flange zone height	AAG018-001

keyword	full preferred name	identifier
flange	larger flange radius	AAG083-001
flange	shape of flange	AAE061-005
flange	smaller flange radius	AAG084-001
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flatness	flatness of frequency response	AAE706-005
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flux	magnetic flux density	AAE769-005
flux	peak flux density	AAE768-005
flux	radiant flux	AAE561-005
flux	radiant flux	AAF065-005
flux	remanent flux density	AAF292-005
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focusing	focusing voltage	AAE585-005
focusing	focusing voltage	AAE586-005
focusing	focusing voltage limiting	AAF314-005
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force	contact member force	AAE925-005
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force	engaging force	AAF045-005
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force	insertion force	AAF045-005
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forced	dc current gain sat	AAE952-005
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gain	small-signal unity gain	AAF166-005
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gate	gate cut-off current	AAE372-005
gate	gate trigger current	AAE732-005
gate	gate trigger voltage	AAE742-005
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keyword	full preferred name	identifier
gate	rate of rise of gate current	AAE736-005
gate	reverse gate current	AAE372-005
gate-source	gate-source cut-off voltage	AAE386-005
gate-source	gate-source threshold voltage	AAE384-005
gate-source	gate-source voltage	AAE381-005
gate-source	gate-source voltage difference	AAE383-005
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grade	hard magnetic material grade	AAE762-005
grade	performance grade	AAE009-005
grade	quality grade	AAE840-005
grade	soft magnetic material grade	AAE764-005
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gravity	centre of gravity (y-axis)	AAF363-001
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grid	grid 1 voltage for cut-off	AAE578-005
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grid	grid 2 voltage for cut-off	AAE584-005
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gross	gross space	AAF400-001
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handling	power handling capacity	AAE048-005
handling	signal handling type	AAE971-007
handling	voltage handling capacity	AAE338-005
hard	hard magnetic material grade	AAE762-005
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heater	heater current	AAE580-005
heater	heater voltage	AAE579-005
heatsink	heatsink temperature	AAE400-005
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height	bump height	AAD146-001
height	bump height tolerance	AAD147-001
height	bumped height	AAD123-001
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height	flange height	AAG019-001
height	flange zone height	AAG018-001
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height	index height	AAG026-001
height	lid height	AAG078-001
height	mounted height	AAE027-005
height	mounted height	AAG001-001
height	mounting height	AAE027-005
height	overall height	AAG125-001
height	package height	AAG003-001
height	package height zone	AAG092-001
height	primitive height	AAF428-001
height	seated height	AAE027-005
height	seated height	AAG001-001
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HIGH	HIGH off-state output current	AAE239-005
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HIGH	HIGH to LOW propagation time	AAE233-005
HIGH	HIGH to LOW transition time	AAE235-005
HIGH	input voltage HIGH	AAE718-005
HIGH	LOW to HIGH delay time	AAE237-005
HIGH	LOW to HIGH propagation time	AAE237-005
HIGH	LOW to HIGH transition time	AAE238-005
HIGH	output voltage HIGH	AAE092-005
HIGH	output voltage HIGH	AAE093-005
HIGH	pulse duration HIGH	AAF216-005
HIGH	pulse width HIGH	AAF216-005
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HIGH-level	HIGH-level input voltage	AAE718-005
HIGH-level	HIGH-level output current	AAE255-005
HIGH-level	HIGH-level output voltage	AAE092-005
HIGH-level	HIGH-level output voltage	AAE093-005
HIGH-state	HIGH-state input current	AAE899-005
HIGH-state	HIGH-state input voltage	AAE718-005
HIGH-state	HIGH-state output current	AAE255-005
HIGH-state	HIGH-state output voltage	AAE092-005
HIGH-state	HIGH-state output voltage ref	AAE093-005
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hold	clock hold time	AAJ103-001
hold	hold time	AAF213-005
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hole	tag hole distance	AAG122-001
hole	tag hole distance	AAG123-001
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housing	housing material	AAE351-006
housing	housing type	AAF467-001
housing	terminal length beside housing	AAF053-005
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humidity	relative humidity RH_1	AAE954-005
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hysteresis	hysteresis in switching distance	AAE869-005
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IC	IC package code	AAE838-005
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keyword	full preferred name	identifier
identification	identification of creator	AAG075-001
identification	source document identification	AAG067-001
identifier	die identifier	AAD001-001
identifier	manufacturer pad identifier	AAD013-001
identifier	package identifier code	AAG060-001
identifier	terminal identifier	AAF357-001
identifier	termination identifier	AAD012-001
IEC	IEC 60191 code	AAG061-001
IEC	IEC flammability	AAF127-005
IEC	IEC reference class	AAE000-001
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impedance	characteristic impedance	AAF260-005
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impedance	impedance	AAE755-005
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impedance	output impedance	AAF044-005
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impedance	source impedance	AAE936-005
increment	increment size	AAE805-005
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index	index datum angle	AAG047-001
index	index datum angle	AAG048-001
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inductance	core inductance parameter	AAE777-005
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inductance	inductance	AAE517-005
inductance	inductance factor	AAE770-005
inductance	inductance level	AAF266-005
inductance	inductance tolerance	AAJ077-001
inductance	inductance tolerance (%)	AAJ076-001
inductance	line coil inductance	AAE607-005
inductance	maximum inductance	AAJ080-001
inductance	minimum inductance	AAJ079-001
induction	magnetic induction	AAE769-005
inductor	type of inductor	AAF390-002
inductor	variable inductor type	AAJ078-001
inertia	rotor inertia	AAE189-005
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inner	inner tape spacing	AAF267-005
input	common-mode input resistance	AAF164-005
input	common-mode input voltage	AAF157-005
input	common-mode input voltage range	AAF157-005
input	crest working input voltage	AAE292-005
input	dc input diode current	AAE217-005

keyword	full preferred name	identifier
input	delta I_CC per input	AAE897-005
input	differential input resistance	AAF163-005
input	emitter-base input capacitance	AAF117-005
input	equivalent input noise voltage	AAE380-005
input	HIGH-level input current	AAE899-005
input	HIGH-level input voltage	AAE718-005
input	HIGH-state input current	AAE899-005
input	HIGH-state input voltage	AAE718-005
input	input bias current	AAF154-005
input	input capacitance	AAE898-005
input	input capacitance	AAE982-005
input	input capacitance at gate	AAE655-005
input	input clamping current	AAE217-005
input	input configuration	AAF191-005
input	input current	AAE895-005
input	input current limit	AAE217-005
input	input hold time	AAJ101-001
input	input impedance	AAE533-005
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input	input offset current	AAF152-005
input	input offset voltage	AAF155-005
input	input power	AAE182-005
input	input return losses	AAE701-005
input	input set-up time	AAJ100-001
input	input standing wave ratio	AAE974-005
input	input voltage	AAE163-005
input	input voltage	AAE224-005
input	input voltage HIGH	AAE718-005
input	input voltage limit	AAE210-005
input	input voltage LOW	AAE719-005
input	input voltage peak-to-peak	AAE288-005
input	LOW-level input current	AAE900-005
input	LOW-level input voltage	AAE719-005
input	LOW-state input current	AAE900-005
input	LOW-state input voltage	AAE719-005
input	non-rep peak input current limit	AAE285-005
input	rated input current	AAE197-005
input	rated input voltage (ac)	AAE184-005
input	rated input voltage (dc)	AAE186-005
input	rated input voltage (pulse)	AAE204-005
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input	temp coef input offset voltage	AAF156-005
input/output	input/output characteristic	AAE787-005
input/output	input/output direction	AAD022-001
inputs	number of inputs	AAE458-005
inrush	peak inrush current limit	AAE284-005
inrush	PTC peak inrush current	AAE619-005
insert	insert material	AAF468-001
insert	insert type	AAF468-001
insertion	direction of insertion	AAJ045-001
insertion	insertion force	AAF045-005
insertion	insertion gain	AAE887-005
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insertions	insertions	AAE361-005
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instruction	installation instruction	AAF433-001
instruction	instruction rate	AAF229-005
instruction	instruction set	AAF324-005
instruction	instruction set architecture	AAF222-005
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insulation	insulation resistance	AAE063-005
insulation	insulation resistance	AAE155-005
insulation	insulation resistance	AAF349-001
insulation	insulation resistance	AAJ087-001
insulation	insulation voltage	AAE513-005
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integrated	integrated component	AAF124-005
integrated	integrated function	AAF134-005
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intensity	luminous intensity class	AAE562-005
intensity	radiant intensity	AAF064-005
interconnection	resistor interconnection	AAF102-005
interface	interface compatibility	AAF323-005
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intermod	intermod distortion d_im	AAE709-005
intermodulation	intermodulation distortion d_3	AAE712-005
intermodulation	intermodulation distortion d_im	AAE711-005
internal	internal clock frequency	AAF225-005
internal	internal radius	AAF430-001
internal	number of internal registers	AAF230-005
international	international standard	AAE012-005
interrupt	interrupt type	AAF325-005
interval	duration	AAE028-005
interval	refresh time interval	AAF331-006
irradiance	irradiance	AAE570-005
irradiation	equivalent noise irradiation	AAE572-005
isolation	isolation voltage min	AAE550-005
Joule-integral	Joule-integral	AAE305-005
Joule-integral	Joule-integral	AAE523-005
junction	junction stress temperature	AAF275-002
junction	junction temperature	AAE337-005
junction	junction temperature	AAE271-005
junction	virtual junction stress temper	AAF275-002
junction	virtual junction temperature	AAE337-005
lacquered	lacquered length	AAE633-005
larger	larger flange radius	AAG083-001
large-signal	large-signal voltage gain	AAF159-005
latching	latching current	AAF137-005
law	resistance law (IEC)	AAE141-005
layout	layout construction	AAE849-005
LDR	LDR recovery rate	AAE617-005
lead	lead diameter	AAG009-001
lead	lead diameter	AAG010-001
lead	lead diameter	AAG011-001
lead	lead form code	AAG058-001
lead	lead length	AAG029-001
lead	lead length	AAG030-001
lead	lead length	AAG031-001
lead	lead length	AAG032-001
lead	lead length	AAG033-001
lead	lead length	AAG034-001
lead	lead length	AAG077-001
lead	lead length	AAG129-001
lead	lead row spacing	AAG053-001
lead	lead row spacing	AAG080-001
lead	lead spacing	AAG017-001
lead	lead thickness	AAG012-001
lead	lead width	AAG008-001
lead	lead width	AAG076-001
lead	preformed lead	AAF372-001
lead-frame	lead-frame material	AAD125-001
leakage	3-state output leakage current	AAE239-005
leakage	3-state output leakage current	AAE240-005
leakage	input leakage current	AAE223-005
leakage	leakage current continuous	AAE043-005
leakage	leakage current short-term	AAE042-005
leakage	leakage path	AAE159-005

keyword	full preferred name	identifier
LED	LED crystal material	AAE563-005
LED	LED light colour	AAE564-005
length	(air) gap length	AAE778-005
length	baffle hole length	AAE054-005
length	body length	AAE019-005
length	character length	AAE850-005
length	contact length under housing	AAE363-005
length	die length	AAD070-001
length	digit length	AAF145-005
length	dot length	AAE852-005
length	effective magnetic path length	AAE776-005
length	element length	AAE576-005
length	extended length	AAE997-005
length	flange length	AAF317-001
length	Flange length	AAG063-001
length	flange overall length	AAG085-001
length	gap length	AAE778-005
length	index length	AAG028-001
length	index terminal length	AAG115-001
length	lacquered length	AAE633-005
length	lead length	AAG029-001
length	lead length	AAG030-001
length	lead length	AAG031-001
length	lead length	AAG032-001
length	lead length	AAG033-001
length	lead length	AAG034-001
length	lead length	AAG077-001
length	lead length	AAG129-001
length	lid length	AAG081-001
length	main overall length	AAG100-001
length	main terminal length	AAG098-001
length	mounted length	AAG035-001
length	non-extended length	AAE998-005
length	non-threaded stud length	AAG133-001
length	other index length	AAG079-001
length	overall length	AAE581-005
length	overall length	AAG023-001
length	overall length	AAG090-001
length	package length	AAG013-001
length	package length	AAG089-001
length	package length zone	AAG020-001
length	pad length	AAD025-001
length	secondary overall length	AAG101-001
length	secondary terminal length	AAG099-001
length	shaft length	AAJ069-001
length	shoulder length	AAG065-001
length	slide length	AAJ019-001
length	spindle length	AAE147-005
length	stand-off length	AAG065-001
length	step length	AAF061-005
length	stroke length	AAJ019-001
length	stud length	AAG095-001
length	substrate length	AAE870-005
length	terminal length	AAE072-005
length	terminal length	AAG029-001
length	terminal length	AAG030-001
length	terminal length	AAG031-001
length	terminal length	AAG032-001
length	terminal length	AAG033-001
length	terminal length	AAG034-001
length	terminal length	AAG077-001
length	terminal length	AAG111-001
length	terminal length	AAG129-001
length	terminal length beside housing	AAF053-005
length	viewing area length	AAE854-005
length	word length	AAE459-005
level	conformity level	AAD137-001
level	die test level code	AAD008-001

keyword	full preferred name	identifier
level	inductance level	AAF266-005
level	level	AAE682-006
level	output sound pressure level	AAF193-005
level	packing level	AAF270-005
level	response level	AAE528-005
level	spurious signal level	AAE880-005
level	spurious signal level (2-tau)	AAE888-005
level	spurious signal level (3-tau)	AAE879-005
lever	lever stop force	AAJ021-001
lid	lid height	AAG078-001
lid	lid length	AAG081-001
lid	lid width	AAG082-001
life	brush life	AAE170-005
life	brush life expectation	AAE171-005
life	cycle life	AAE944-005
life	mechanical life	AAE922-005
life	operating life	AAJ067-001
life	shelf life	AAE041-005
life	shelf life	AAE942-005
life	storage life	AAE942-005
light	collector current light	AAF138-005
light	collector current light	AAF140-005
light	LED light colour	AAE564-005
light	light colour	AAE564-005
light	light resistance	AAE124-005
light	light transmission	AAE596-005
light	reverse current light	AAF143-005
lighting	lighting mode	AAE856-005
limit	drain-source voltage limit	AAE377-005
limit	drain-substrate voltage limit	AAE379-005
limit	forward current limit	AAE546-005
limit	gate-source voltage limit	AAF118-005
limit	input current limit	AAE217-005
limit	input voltage limit	AAE210-005
limit	non-rep peak input current limit	AAE285-005
limit	output current limit	AAE218-005
limit	peak inrush current limit	AAE284-005
limit	power limit	AAD151-001
limit	source-substrate voltage limit	AAE387-005
limit	spectral response lower limit	AAE573-005
limit	spectral response upper limit	AAE574-005
limit	supply voltage limit	AAE086-005
limiting	anode voltage limiting	AAF315-005
limiting	focusing voltage limiting	AAF314-005
limiting	limiting contact voltage	AAE513-005
limiting	limiting element voltage (ac)	AAF281-005
limiting	limiting element voltage (dc)	AAE118-005
limiting	limiting voltage (ac)	AAF281-005
limiting	limiting voltage (dc)	AAE118-005
line	delay line application	AAE542-005
line	delay line type	AAE878-005
line	line coil inductance	AAE607-005
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load	load impedance	AAE938-005
load	load power	AAE422-005
load	load resistance	AAE212-005
load	max load torque	AAE191-005
load	output power	AAE955-005
location	x-coordinate position location	AAF406-001
location	y-coordinate position location	AAF407-001
location	z-coordinate position location	AAF408-001
locking	locking device	AAF051-005
loss	insertion loss	AAE887-005
loss	loss factor	AAF298-005
loss	power loss	AAE775-005
loss	specific total loss	AAF300-005
loss	tangent of loss angle	AAE065-005
loss	total loss volume density	AAF300-005
loss	total power loss	AAE775-005
losses	input return losses	AAE701-005
losses	output return losses	AAE702-005
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LOW	HIGH to LOW propagation time	AAE233-005
LOW	HIGH to LOW transition time	AAE235-005
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LOW	LOW off-state output current	AAE240-005
LOW	LOW to HIGH delay time	AAE237-005
LOW	LOW to HIGH propagation time	AAE237-005
LOW	LOW to HIGH transition time	AAE238-005
LOW	output voltage LOW	AAE094-005
LOW	pulse duration LOW	AAF217-005
LOW	pulse width LOW	AAF217-005
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lower	capacitance lower tolerance (%)	AAE018-001
lower	diode lower capacitance	AAF304-005
lower	lower frequency	AAE157-005
lower	spectral response lower limit	AAE573-005
lowest	lowest resonance frequency	AAE050-005
LOW-level	LOW-level input current	AAE900-005
LOW-level	LOW-level input voltage	AAE719-005
LOW-level	LOW-level output current	AAE254-005
LOW-level	LOW-level output voltage	AAE094-005
LOW-level	LOW-level output voltage	AAE097-005
LOW-state	LOW-state input current	AAE900-005
LOW-state	LOW-state input voltage	AAE719-005
LOW-state	LOW-state output current	AAE254-005
LOW-state	LOW-state output voltage	AAE097-005
LOW-state	LOW-state output voltage ref	AAE094-005
LOW-state	LOW-state supply current	AAE902-005
luminance	luminance contrast ratio	AAE848-005
luminous	luminous intensity	AAE565-005
luminous	luminous intensity class	AAE562-005
machine	machine cycle	AAF223-005
magnet	magnet	AAE053-005
magnet	magnet material	AAE053-005
magnet	magnet material	AAE174-005
magnet	magnet type	AAE174-005
magnetic	effective magnetic path length	AAE776-005
magnetic	hard magnetic material grade	AAE762-005
magnetic	magnetic field strength	AAE863-005
magnetic	magnetic field strength	AAF284-005
magnetic	magnetic flux density	AAE769-005
magnetic	magnetic induction	AAE769-005
magnetic	peak flux density	AAE768-005
magnetic	peak magnetic field strength	AAE767-005
magnetic	soft magnetic material grade	AAE764-005
magnetisation	magnetisation system	AAE174-005
main	main class of component	AAE001-005
main	main overall length	AAG100-001
main	main terminal length	AAG098-001
major	major edge	AAF426-001
major	major radius of torus	AAF421-001
major	stand-off major dimension	AAG005-001
manufacturer	die manufacturer	AAD140-001
manufacturer	manufacturer package code	AAG069-001
manufacturer	manufacturer pad identifier	AAD013-001
marking	marking method	AAF269-005
mass	mass	AAE752-005
material	armature material	AAE176-005
material	bulk material	AAD148-001

keyword	full preferred name	identifier
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material	conductive material	AAF241-005
material	contact body material	AAE355-005
material	contact spring material	AAF125-005
material	dielectric material type	AAE004-007
material	electrode material type	AAE040-005
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material	film dielectric material	AAE039-005
material	hard magnetic material grade	AAE762-005
material	housing material	AAE351-006
material	hysteresis material constant	AAF306-005
material	insert material	AAF468-001
material	insulating material	AAF248-005
material	lead-frame material	AAD125-001
material	LED crystal material	AAE563-005
material	magnet material	AAE053-005
material	magnet material	AAE174-005
material	material type	AAF311-006
material	passivation material	AAD078-001
material	resistance element material	AAE116-005
material	resistive material	AAE116-005
material	soft magnetic material grade	AAE764-005
material	spindle material	AAE145-005
material	spindle material of potentiometer	AAE145-005
material	substrate material	AAD005-001
material	terminal material	AAE634-005
maturity	test maturity code	AAD154-001
max	BH product max	AAF295-005
max	collector current (dc) max	AAE405-005
max	contact current max	AAE358-005
max	energy absorbing capacity max	AAE430-005
max	max change rate output voltage	AAF162-005
max	max load torque	AAE191-005
max	max peak voltage at I_class	AAE319-005
max	max pull-in	AAE202-005
max	max range value	AAF360-001
max	max working torque	AAE191-005
max	stress temperature max	AAF277-002
maximum	maximum assembly temperature	AAD149-001
maximum	maximum axial force	AAE200-005
maximum	maximum body temperature	AAE115-005
maximum	maximum capacitance	AAE068-005
maximum	maximum clamping voltage	AAE319-005
maximum	maximum clock frequency	AAF211-005
maximum	maximum current	AAJ062-001
maximum	maximum inductance	AAJ080-001
maximum	maximum noise power	AAE048-005
maximum	maximum noise voltage	AAE338-005
maximum	maximum operating voltage	AAJ061-001
maximum	maximum output current	AAE168-005
maximum	maximum radial force	AAE190-005
maximum	maximum surface temperature	AAE115-005
maximum	maximum work torque	AAE201-005
mechanical	angle of mechanical rotation	AAE173-005
mechanical	mechanical endurance	AAE361-005
mechanical	mechanical life	AAE922-005
mechanical	mechanical time constant	AAE187-005
mechanical	total mechanical rotation	AAE173-005
member	contact member force	AAE925-005
memory	on-chip memory	AAF327-005
memory/register	memory/register function	AAE722-007
metallisation	pad metallisation	AAD120-001
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method	connection method	AAE985-005
method	coupling method	AAF192-005
method	driving method	AAE839-005
method	driving method	AAF264-005
method	marking method	AAF269-005
method	modulation method	AAE490-005
method	mounting method	AAF343-001
MIL	MIL cable type	AAF252-005
MIL	MIL specification	AAF370-001
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min	min range value	AAF361-001
min	stress temperature min	AAF276-002
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minimum	minimum capacitance	AAE069-005
minimum	minimum cross-sectional area	AAF283-005
minimum	minimum inductance	AAJ079-001
minimum	test voltage minimum	AAF251-005
minor	minor edge	AAF427-001
minor	minor radius	AAF432-001
minor	minor radius of torus	AAF422-001
minor	stand-off minor dimension	AAG006-001
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mode	addressing mode	AAF326-005
mode	application mode	AAE864-005
mode	common mode rejection ratio	AAE374-005
mode	driving mode	AAE839-005
mode	illumination mode	AAE856-005
mode	lighting mode	AAE856-005
mode	mode of control	AAE464-005
mode	mode of operation	AAE786-005
mode	pressure mode	AAE864-005
model	transformer model	AAE167-005
modulation	cross modulation	AAE703-005
modulation	modulation method	AAE490-005
modulus	modulus of admittance	AAF459-001
modulus	modulus of impedance	AAF456-001
motion	trajectory of motion	AAE179-005
motor	ac motor synchronism	AAE183-005
mounted	mounted height	AAE027-005
mounted	mounted height	AAG001-001
mounted	mounted length	AAG035-001
mounted	mounted width	AAG036-001
mounting	mounting base temperature	AAE336-005
mounting	mounting base temperature	AAE272-005
mounting	mounting deviation y/x	AAF405-001
mounting	mounting deviation y/z	AAF404-001
mounting	mounting features	AAE006-006
mounting	mounting height	AAE027-005
mounting	mounting hole diameter	AAG039-001
mounting	mounting hole position	AAG064-001
mounting	mounting hole separation	AAG042-001
mounting	mounting method	AAF343-001
mounting	mounting of loudspeaker	AAE342-005
mounting	mounting position	AAE144-005
mounting	x-coor preferred mounting position	AAF401-001
mounting	x-coor preferred mounting position	AAF402-001
mounting	z-coor preferred mounting position	AAF403-001
mounting-cap	mounting-cap code	AAE522-005
moving	moving contact actuator type	AAE142-005
MPD	MPD delivery form	AAD155-001
multiplex	multiplex ratio	AAE839-005
multiplicity	multiplicity	AAF101-006
name	accessory name	AAF309-005
name	die name	AAD002-001
name	fiducial file name	AAD157-001
name	fiducial name	AAD156-001
name	packaged part name	AAD143-001
name	pad geometry name	AAD014-001
name	signal name	AAD019-001
name	supply name	AAD049-001

keyword	full preferred name	identifier
name	test name	AAD082-001
national	national standard	AAF043-005
nearest	nearest conventional type	AAE494-005
neck	neck diameter	AAE589-005
negative	negative capacitance tolerance	AAF448-001
negative	negative resistance tolerance	AAF452-001
negative	negative tolerance	AAF444-001
negative-going	negative-going threshold	AAF209-005
net	net area	AAF397-001
net	net space	AAF399-001
network	filter	AAE343-005
noise	average noise factor	AAE647-005
noise	average noise figure	AAE647-005
noise	equivalent input noise voltage	AAE380-005
noise	equivalent noise irradiation	AAE572-005
noise	equivalent noise voltage	AAE380-005
noise	maximum noise power	AAE048-005
noise	maximum noise voltage	AAE338-005
noise	noise equivalent power	AAE572-005
noise	noise figure	AAE647-005
noise	noise figure	AAE648-005
noise	noise figure	AAE657-005
noise	resistor noise index	AAE621-005
noise	spot noise factor	AAE648-005
noise	spot noise factor	AAE657-005
noise	spot noise figure	AAE648-005
noise	spot noise figure	AAE657-005
no-load	no-load output voltage	AAE164-005
nominal	nominal capacity	AAE530-005
nominal	nominal current	AAE521-005
nominal	nominal output current	AAE160-005
nominal	nominal voltage	AAE519-005
non-extended	non-extended length	AAE998-005
non-rep	non-rep peak input current limit	AAE285-005
non-rep	non-rep peak on-state current	AAE730-005
non-rep	non-rep peak rev avalanche energy	AAE304-005
non-rep	non-rep peak reverse current	AAE315-005
non-rep	non-rep peak reverse power diss	AAE303-006
non-rep	non-rep peak reverse power diss	AAE327-006
non-rep	non-rep peak reverse power diss	AAF389-001
non-rep	non-rep varistor peak current	AAE298-005
non-repetitive	non-repetitive peak forward current	AAE294-005
non-repetitive	non-repetitive peak reverse current	AAE318-005
non-repetitive	non-repetitive peak reverse voltage	AAE301-005
non-repetitive	non-repetitive surge current	AAE298-005
non-repetitive	non-repetitive transient current	AAE298-005
non-SMD	terminal exit position non-SMD	AAF346-001
non-SMD	terminal shape non-SMD	AAF347-001
non-threaded	non-threaded stud length	AAG133-001
non-trip	non-trip current	AAE137-005
normal	normal average value	AAF365-001
normal	normal standard deviation	AAF366-001
NTC	NTC thermistor type	AAJ004-001
number	actual terminal number	AAG059-001
number	ganging number	AAE172-005
number	number of bits	AAE459-005
number	number of bond sites	AAD018-001

keyword	full preferred name	identifier
number	number of cable elements	AAF255-005
number	number of cells in series	AAE940-005
number	number of charge cycles	AAE944-005
number	number of clock periods	AAF223-005
number	number of columns	AAF437-001
number	number of contact assemblies	AAE921-005
number	number of contacts	AAE359-005
number	number of contacts per row	AAF150-005
number	number of functions	AAE106-005
number	number of holes	AAF351-001
number	number of inputs	AAE458-005
number	number of internal registers	AAF230-005
number	number of peripherals	AAF329-005
number	number of phases	AAF131-005
number	number of pins	AAE754-005
number	number of pitches (x-axis)	AAF374-001
number	number of pitches (y-axis)	AAF375-001
number	number of poles	AAE921-005
number	number of poles	AAJ064-001
number	number of polygon vertices	AAD027-001
number	number of potential terminals	AAG037-001
number	number of primary coils	AAF048-005
number	number of rows	AAE360-005
number	number of secondary coils	AAF099-005
number	number of sections	AAE996-005
number	number of stable positions	AAE929-005
number	number of studs	AAF373-001
number	number of terminals	AAE139-005
number	number of terminals	AAE754-005
number	number of variable elements	AAE172-005
number	number of words	AAE474-005
number	termination number	AAD012-001
number	vertex number	AAD028-001
numbers	complex numbers	AAF441-001
numeral	numeral system	AAE457-005
offset	input offset current	AAF152-005
offset	input offset voltage	AAF155-005
offset	offset (x-axis)	AAF341-001
offset	offset (y-axis)	AAF340-001
offset	temp coef input offset current	AAF153-005
offset	temp coef input offset voltage	AAF156-005
off-state	drain-source off-state resistance	AAE394-005
off-state	HIGH off-state output current	AAE239-005
off-state	LOW off-state output current	AAE240-005
off-state	off-state current	AAE239-005
off-state	off-state current	AAE240-005
off-state	off-state current	AAF135-005
off-state	off-state supply current	AAE903-005
off-state	off-state voltage	AAE738-005
off-state	off-state voltage	AAE737-005
off-state	rate of rise of off-state volt	AAE727-005
off-state	rate of rise of off-state voltage	AAE740-005
off-state	repetitive peak off-state voltage	AAE739-005
on-chip	on-chip memory	AAF327-005
on-state	average on-state current	AAE744-005
on-state	drain-source on-state resistance	AAE391-005
on-state	drain-source on-state resistance	AAE393-005
on-state	forward voltage	AAE499-005
on-state	non-rep peak on-state current	AAE730-005
on-state	on-state current	AAE733-005
on-state	on-state voltage	AAE279-005
on-state	rate of rise of on-state curr	AAE684-005
on-state	rate of rise on-state current	AAE734-005

keyword	full preferred name	identifier
on-state	repetitive peak on-state current	AAE729-005
on-state	rms on-state current	AAE728-005
on-state	rms on-state current	AAF063-005
on-state	surge on-state current	AAE730-005
open-circuit	open-circuit sensitivity	AAE862-005
open-circuit	open-circuit voltage	AAE529-005
opening	connector opening	AAE362-005
operate	operate time	AAE923-005
operating	maximum operating voltage	AAJ061-001
operating	operating frequency	AAE166-005
operating	operating frequency	AAE872-005
operating	operating humidity	AAE857-005
operating	operating life	AAJ067-001
operating	operating pressure	AAE866-005
operating	operating voltage	AAE992-005
operating	operating voltage	AAE842-005
operation	mode of operation	AAE786-005
operational	rated operational current (dc)	AAF106-005
operational	rated operational voltage (ac)	AAE512-005
operational	rated operational voltage (dc)	AAF107-005
optic	fibre optic component	AAJ048-001
options	process options	AAD134-001
options	test options	AAD134-001
optoelectronic	optoelectronic device function	AAE545-006
optoelectronic	optoelectronic package	AAE816-005
orientation	fiducial orientation	AAD162-001
orientation	orientation	AAF268-005
orientation	pad orientation	AAD017-001
other	other index length	AAG079-001
output	3-state output leakage current	AAE239-005
output	3-state output leakage current	AAE240-005
output	address to output delay	AAE720-005
output	average output current	AAE286-005
output	dc output diode current	AAE218-005
output	dynamic output current	AAF207-005
output	HIGH off-state output current	AAE239-005
output	HIGH-level output current	AAE255-005
output	HIGH-level output voltage	AAE092-005
output	HIGH-level output voltage	AAE093-005
output	HIGH-state output current	AAE255-005
output	HIGH-state output voltage	AAE092-005
output	HIGH-state output voltage ref	AAE093-005
output	LOW off-state output current	AAE240-005
output	LOW-level output current	AAE254-005
output	LOW-level output voltage	AAE094-005
output	LOW-level output voltage	AAE097-005
output	LOW-state output current	AAE254-005
output	LOW-state output voltage	AAE097-005
output	LOW-state output voltage ref	AAE094-005
output	max change rate output voltage	AAF162-005
output	maximum output current	AAE168-005
output	no-load output voltage	AAE164-005
output	nominal output current	AAE160-005
output	output capacitance	AAE983-005
output	output clamping current	AAE218-005
output	output current	AAE867-005
output	output current	AAE226-005
output	output current EHT supply	AAE282-005
output	output current focus supply	AAE283-005
output	output current limit	AAE218-005
output	output data-valid time	AAF232-005
output	output disable time	AAF215-005
output	output enable time	AAF214-005
output	output fall time	AAE235-005
output	output hold time	AAJ104-001
output	output impedance	AAF044-005

keyword	full preferred name	identifier
output	output power	AAE165-005
output	output power	AAE422-005
output	output power	AAE955-005
output	output resistance	AAF165-005
output	output return losses	AAE702-005
output	output rise time	AAE238-005
output	output short-circuit current	AAF207-005
output	output sink current	AAE254-005
output	output sound pressure level	AAF193-005
output	output source current	AAE255-005
output	output standing wave ratio	AAE975-005
output	output voltage	AAE169-005
output	output voltage	AAE698-005
output	output voltage	AAE726-005
output	output voltage	AAE228-005
output	output voltage EHT supply	AAE289-005
output	output voltage HIGH	AAE092-005
output	output voltage HIGH	AAE093-005
output	output voltage LOW	AAE094-005
output	output voltage peak-to-peak	AAF158-005
output	output voltage swing	AAF158-005
output	power dissipation per output	AAE214-005
output	radiant output power	AAE561-005
output	repetitive peak output current	AAE287-005
output	short-circuit output capacitance	AAE983-005
output	sync output power	AAE704-005
output	synchronous output power	AAE714-005
output	total radiant output power	AAF065-005
outside	outside diameter	AAE022-005
overall	flange overall length	AAG085-001
overall	flange overall width	AAG086-001
overall	main overall length	AAG100-001
overall	overall diameter	AAG025-001
overall	overall height	AAG125-001
overall	overall length	AAE581-005
overall	overall length	AAG023-001
overall	overall length	AAG090-001
overall	overall width	AAG024-001
overall	secondary overall length	AAG101-001
overhang	package overhang	AAG046-001
overload	continuous overload	AAE168-005
package	amplifier package	AAE969-005
package	diode package	AAE331-005
package	IC package	AAJ046-001
package	IC package code	AAE838-005
package	manufacturer package code	AAG069-001
package	optoelectronic package	AAE816-005
package	package colour	AAE560-005
package	package colour	AAF128-005
package	package diameter	AAG014-001
package	package diameter	AAG062-001
package	package diameter	AAG116-001
package	package diameter zone	AAG022-001
package	package height	AAG003-001
package	package height zone	AAG092-001
package	package identifier code	AAG060-001
package	package length	AAG013-001
package	package length	AAG089-001
package	package length zone	AAG020-001
package	package overhang	AAG046-001
package	package style code	AAG057-001
package	package thickness	AAG003-001
package	package type	AAJ046-001
package	package width	AAG016-001
package	package width zone	AAG021-001
package	standard package code	AAG070-001
package	transistor package	AAE637-005
packaged	packaged part name	AAD143-001
packing	packing arrangement	AAF265-005

keyword	full preferred name	identifier
packing	packing level	AAF270-005
packing	packing type	AAE111-005
packing	supply packing	AAD089-001
packing	supply packing code	AAD055-001
packing	supply packing description	AAD090-001
pad	manufacturer pad identifier	AAD013-001
pad	pad current	AAD033-001
pad	pad diameter	AAD121-001
pad	pad geometry count	AAD116-001
pad	pad geometry name	AAD014-001
pad	pad length	AAD025-001
pad	pad metallisation	AAD120-001
pad	pad orientation	AAD017-001
pad	pad shape	AAD024-001
pad	pad supply current	AAD033-001
pad	pad width	AAD026-001
pad	pad x position	AAD015-001
pad	pad y position	AAD016-001
page	source document page	AAG068-001
parameter	core inductance parameter	AAE777-005
part	packaged part name	AAD143-001
pass-band	pass-band attenuation	AAF121-005
passivation	passivation material	AAD078-001
path	effective magnetic path length	AAE776-005
path	leakage path	AAE159-005
pattern	terminal pattern	AAG107-001
PCB	PCB connector type	AAJ022-001
peak	anode current peak	AAF204-005
peak	collector current peak value	AAE407-005
peak	collector-emitter peak voltage	AAE415-005
peak	max peak voltage at I_class	AAE319-005
peak	non-rep peak input current limit	AAE285-005
peak	non-rep peak on-state current	AAE730-005
peak	non-rep peak rev avalanche energy	AAE304-005
peak	non-rep peak reverse current	AAE315-005
peak	non-rep peak reverse power diss	AAE303-006
peak	non-rep peak reverse power diss	AAE327-006
peak	non-rep peak reverse power diss	AAF389-001
peak	non-rep varistor peak current	AAE298-005
peak	non-repetitive peak forward current	AAE294-005
peak	non-repetitive peak reverse current	AAE318-005
peak	non-repetitive peak reverse voltage	AAE301-005
peak	peak envelope power	AAE708-005
peak	peak envelope power PEP	AAE707-005
peak	peak flux density	AAE768-005
peak	peak inrush current limit	AAE284-005
peak	peak magnetic field strength	AAE767-005
peak	peak working current	AAE317-005
peak	PTC peak current	AAE620-005
peak	PTC peak inrush current	AAE619-005
peak	repetitive peak forward current	AAE293-005
peak	repetitive peak input voltage	AAE290-005
peak	repetitive peak off-state voltage	AAE739-005
peak	repetitive peak on-state current	AAE729-005
peak	repetitive peak output current	AAE287-005
peak	repetitive peak recovery current	AAE297-005
peak	repetitive peak reverse current	AAE297-005
peak	repetitive peak reverse power	AAE302-005
peak	repetitive peak reverse voltage	AAE300-005
peak	wavelength at peak emission	AAE556-005
peak	wavelength at peak response	AAE568-005
peak	wavelength at peak value	AAE569-005
peak	working peak forward current	AAE296-005
peak-emission	peak-emission wavelength	AAE556-005
peak-response	peak-response wavelength	AAE568-005
peak-to-peak	input voltage peak-to-peak	AAE288-005
peak-to-peak	output voltage peak-to-peak	AAF158-005
penetration	difference in penetration factor	AAE716-005
PEP	peak envelope power PEP	AAE707-005
percentage	percentage tolerance	AAF443-001
performance	performance class	AAE357-005
performance	performance grade	AAE009-005
periodic/dc	periodic/dc function	AAE789-005
periods	number of clock periods	AAF223-005
peripheral	peripheral type	AAF335-005
peripheral	peripheral word size	AAF330-005
peripherals	number of peripherals	AAF329-005
permeability	amplitude permeability	AAE773-005
permeability	effective permeability	AAE771-005
permeability	initial permeability	AAE772-005
permeability	recoil permeability	AAF294-005
permeability	temperature factor of permeability	AAF307-005
permutability	permutability indicator	AAF359-001
phase	current per phase	AAE203-005
phase	phase angle	AAF454-001
phase	phase angle	AAF455-001
phase	phase delay drift	AAE886-005
phase	phase delay time	AAE544-005
phase	phase relation	AAE885-005
phases	number of phases	AAF131-005
phosphor	phosphor code	AAE605-005
photoemitter	photoemitter function	AAE555-005
pickup	image pickup device type	AAJ074-001
picture	die picture	AAD127-001
pin	pin plug/jack type	AAJ026-001
pinning	pinning arrangement	AAE348-005
pins	number of pins	AAE754-005
pitch	contact pitch	AAJ039-001
pitch	hole pitch	AAF316-001
pitch	pitch (x-axis)	AAF321-001
pitch	pitch (y-axis)	AAF322-001
pitch	pitch circle diameter	AAF337-001
pitch	pixel pitch horizontal	AAE805-005
pitch	terminal pitch	AAE024-005
pitches	number of pitches (x-axis)	AAF374-001
pitches	number of pitches (y-axis)	AAF375-001
pixel	pixel pitch horizontal	AAE805-005
placement	adjuster placement	AAF371-001
placement	terminal placement	AAE008-005
PLD	PLD programmability	AAF231-005
plug/jack	concentric plug/jack type	AAJ025-001
plug/jack	dc power plug/jack type	AAJ027-001
plug/jack	pin plug/jack type	AAJ026-001
plug/jack	plug/jack type	AAJ024-001
point	Curie point	AAE761-005
point	x-coordinate of the reference point	AAF393-001
point	y-coordinate of the reference point	AAF394-001
point	z-coordinate of the reference point	AAF395-001
Poisson	Poisson expectation value	AAF368-001
Poisson	Poisson variance value	AAF367-001

keyword	full preferred name	identifier
polarisation	polarisation	AAE354-005
polarity	polarity type	AAE263-005
polarity	transistor polarity	AAE638-005
pole	centre pole diameter	AAE051-005
poles	number of poles	AAE921-005
poles	number of poles	AAJ064-001
polygon	number of polygon vertices	AAD027-001
position	fiducial x position	AAD160-001
position	fiducial y position	AAD161-001
position	mounting hole position	AAG064-001
position	mounting position	AAE144-005
position	pad x position	AAD015-001
position	pad y position	AAD016-001
position	terminal exit position non-SMD	AAF346-001
position	terminal exit position SMD	AAF345-001
position	terminal position code	AAG056-001
position	terminal reference position	AAG044-001
position	terminal reference position	AAG045-001
position	terminal reference position	AAG108-001
position	terminal reference position	AAG112-001
position	terminal reference position	AAG113-001
position	x-coor preferred mounting position	AAF401-001
position	x-coor preferred mounting position	AAF402-001
position	x-coordinate position location	AAF406-001
position	y-coordinate position location	AAF407-001
position	z-coor preferred mounting position	AAF403-001
position	z-coordinate position location	AAF408-001
positions	contact positions	AAE359-005
positions	number of stable positions	AAE929-005
positions	quantity of terminal positions	AAG037-001
positions	quantity of terminal positions	AAG109-001
positions	quantity of terminal positions	AAG110-001
positions	stable positions	AAE929-005
positive	positive capacitance tolerance	AAF449-001
positive	positive resistance tolerance	AAF453-001
positive	positive tolerance	AAF445-001
positive-going	positive-going threshold	AAF208-005
potential	number of potential terminals	AAG037-001
potentiometer	potentiometer size	AAJ014-001
potentiometer	spindle material of potentiometer	AAE145-005
power	contact power (ac)	AAE928-005
power	contact power (dc)	AAF130-005
power	dc power dissipation/output	AAE214-005
power	dc power plug/jack type	AAJ027-001
power	fusing power	AAJ011-001
power	input power	AAE182-005
power	load power	AAE422-005
power	maximum noise power	AAE048-005
power	noise equivalent power	AAE572-005
power	non-rep peak reverse power diss	AAE303-006
power	non-rep peak reverse power diss	AAE327-006
power	non-rep peak reverse power diss	AAF389-001
power	output power	AAE165-005
power	output power	AAE422-005
power	output power	AAE955-005
power	peak envelope power	AAE708-005
power	peak envelope power PEP	AAE707-005
power	power consumption	AAE987-005
power	power consumption	AAJ063-001
power	power dissipation	AAE257-005
power	power dissipation per output	AAE214-005
power	power gain	AAE424-005

keyword	full preferred name	identifier
power	power handling capacity	AAE048-005
power	power limit	AAD151-001
power	power loss	AAE775-005
power	power socket type	AAJ030-001
power	power supply rejection ratio	AAF170-005
power	power transformer application	AAF098-005
power	radiant output power	AAE561-005
power	rated power	AAE048-005
power	repetitive peak reverse power	AAE302-005
power	sync output power	AAE704-005
power	synchronous output power	AAE714-005
power	thermal time-constant (power)	AAJ073-001
power	total power loss	AAE775-005
power	total radiant output power	AAF065-005
power	unilateral power gain	AAE713-005
power/signal	power/signal	AAE152-005
pre-arcing	fuse pre-arcing time	AAJ034-001
preferred	preferred viewing direction	AAE991-005
preferred	x-coor preferred mounting position	AAF401-001
preferred	x-coor preferred mounting position	AAF402-001
preferred	z-coor preferred mounting position	AAF403-001
preformed	preformed lead	AAF372-001
pressure	operating pressure	AAE866-005
pressure	output sound pressure level	AAF193-005
pressure	pressure mode	AAE864-005
primary	number of primary coils	AAF048-005
primary	primary electrochemical system	AAE531-005
primitive	primitive height	AAF428-001
principle	sensor working principle	AAE893-005
principle	transducer principle	AAE005-006
principle	working principle	AAE877-005
printed	printed board thickness	AAE362-005
probability	probability distribution	AAF364-001
procedure	test procedure description	AAD060-001
process	process options	AAD134-001
product	B_r x H_cJ product	AAF296-005
product	BH product max	AAF295-005
product	gain bandwidth product	AAF167-005
product	RC product	AAE066-005
programmability	PLD programmability	AAF231-005
programmability	ROM programmability	AAF236-005
programming	programming current	AAF237-005
programming	programming voltage	AAF238-005
project	project view code	AAF392-001
propagation	HIGH to LOW propagation time	AAE233-005
propagation	LOW to HIGH propagation time	AAE237-005
propagation	propagation delay	AAE231-005
PTC	PTC application	AAE618-005
PTC	PTC peak current	AAE620-005
PTC	PTC peak inrush current	AAE619-005
PTC	PTC residual current	AAE629-005
PTC	PTC switching resistance	AAE626-005
pull-in	max pull-in	AAE202-005
pull-in	pull-in rate	AAE205-005
pull-in	pull-in torque	AAE202-005
pull-out	pull-out rate	AAE206-005
pull-out	pull-out torque	AAE201-005
pulse	current (pulse)	AAE125-005
pulse	pulse duration HIGH	AAF216-005
pulse	pulse duration LOW	AAF217-005
pulse	pulse shape	AAE622-006
pulse	pulse width HIGH	AAF216-005

keyword	full preferred name	identifier
pulse	pulse width LOW	AAF217-005
pulse	rated input voltage (pulse)	AAE204-005
Q-factor	Q-factor	AAJ090-001
q-supply	additional q-supply current	AAE897-005
quality	quality approval authority	AAE687-005
quality	quality assurance	AAE687-005
quality	quality certification	AAE687-005
quality	quality factor	AAE518-005
quality	quality factor	AAJ090-001
quality	quality grade	AAE840-005
quantity	actual quantity of termination	AAG059-001
quantity	actuating quantity	AAE926-005
quantity	amplified quantity	AAF169-005
quantity	quantity of missing terminals	AAG038-001
quantity	quantity of terminal positions	AAG037-001
quantity	quantity of terminal positions	AAG109-001
quantity	quantity of terminal positions	AAG110-001
quantity	sensor input quantity	AAE892-005
quiescent	additional quiescent current	AAE897-005
quiescent	quiescent current	AAE896-005
quiescent	quiescent supply current	AAE896-005
radial	maximum radial force	AAE190-005
radiant	radiant flux	AAE561-005
radiant	radiant flux	AAF065-005
radiant	radiant intensity	AAF064-005
radiant	radiant output power	AAE561-005
radiant	total radiant output power	AAF065-005
radiation	radiation type	AAE566-005
radius	bending radius	AAF434-001
radius	cone radius	AAF414-001
radius	curve radius	AAG043-001
radius	cylinder radius	AAF409-001
radius	external radius	AAF431-001
radius	face-plate radius	AAE804-005
radius	internal radius	AAF430-001
radius	larger flange radius	AAG083-001
radius	major radius of torus	AAF421-001
radius	minor radius	AAF432-001
radius	minor radius of torus	AAF422-001
radius	screen curvature radius	AAE804-005
radius	smaller flange radius	AAG084-001
radius	sphere radius	AAF417-001
RAM	RAM type	AAF233-005
random	random read/write cycle time	AAJ094-001
range	common-mode input voltage range	AAF157-005
range	max range value	AAF360-001
range	min range value	AAF361-001
RAS	access time from RAS	AAE720-005
RAS	access time from RAS	AAJ095-001
rate	defect rate	AAD131-001
rate	instruction rate	AAF229-005
rate	LDR recovery rate	AAE617-005
rate	max change rate output voltage	AAF162-005
rate	pull-in rate	AAE205-005
rate	pull-out rate	AAE206-005
rate	rate change of forward current	AAE275-005
rate	rate of rise commutating voltage	AAE741-005
rate	rate of rise of commut current	AAE735-005
rate	rate of rise of gate current	AAE736-005
rate	rate of rise of off-state volt	AAE727-005
rate	rate of rise of off-state voltage	AAE740-005
rate	rate of rise of on-state curr	AAE684-005
rate	rate of rise on-state current	AAE734-005
rate	slew rate	AAF162-005
rate	stepping rate	AAE209-005
rated	connector rated current	AAJ043-001
rated	connector rated voltage	AAJ042-001
rated	rated breaking capacity	AAF122-005
rated	rated current	AAE525-005
rated	rated force	AAF133-005
rated	rated impedance	AAE049-005
rated	rated input current	AAE197-005
rated	rated input voltage (ac)	AAE184-005
rated	rated input voltage (dc)	AAE186-005
rated	rated input voltage (pulse)	AAE204-005
rated	rated operational current (dc)	AAF106-005
rated	rated operational voltage (ac)	AAE512-005
rated	rated operational voltage (dc)	AAF107-005
rated	rated power	AAE048-005
rated	rated speed	AAE195-005
rated	rated temperature	AAE267-005
rated	rated temperature	AAJ055-001
rated	rated torque	AAE191-005
rated	rated voltage	AAJ010-001
rated	rated voltage	AAJ060-001
rated	rated voltage (ac)	AAE045-005
rated	rated voltage (dc)	AAE044-005
rated	upper rated frequency	AAE339-005
ratio	brightness contrast ratio	AAE848-005
ratio	capacitance ratio	AAE502-005
ratio	collector current ratio	AAE640-005
ratio	common mode rejection ratio	AAE374-005
ratio	common-mode rejection ratio	AAF160-005
ratio	contrast ratio	AAE848-005
ratio	current transfer ratio	AAE548-005
ratio	input standing wave ratio	AAE974-005
ratio	luminance contrast ratio	AAE848-005
ratio	multiplex ratio	AAE839-005
ratio	output standing wave ratio	AAE975-005
ratio	power supply rejection ratio	AAF170-005
ratio	resistance ratio R_Tamb/R_Tref	AAE875-005
ratio	supply voltage rejection ratio	AAF170-005
ratio	voltage standing wave ratio	AAJ041-001
RC	RC product	AAE066-005
reactance	reactance	AAF458-001
read/write	random read/write cycle time	AAJ094-001
recoil	recoil permeability	AAF294-005
record	date of creation of record	AAG074-001
recovery	LDR recovery rate	AAE617-005
recovery	recovery time	AAF219-005
recovery	repetitive peak recovery current	AAE297-005
recovery	reverse recovery time	AAE281-005
recovery	reverse recovery time (I)	AAF301-005
recovery	total reverse recovery time	AAE306-005
rectifier	rectifier diode application	AAE505-005
reference	drawing reference code	AAG066-001
reference	electrical reference	AAD021-001
reference	IEC reference class	AAE000-001
reference	reference capacitance	AAE860-005
reference	reference conditions	AAE995-005
reference	reference resistance	AAE874-005
reference	reference temperature	AAE017-005
reference	reference view	AAF356-001
reference	reference voltage	AAE324-005
reference	standards document reference	AAG071-001
reference	terminal reference position	AAG044-001
reference	terminal reference position	AAG045-001
reference	terminal reference position	AAG108-001
reference	terminal reference position	AAG112-001
reference	terminal reference position	AAG113-001
reference	x-coordinate of the reference point	AAF393-001
reference	y-coordinate of the reference point	AAF394-001

keyword	full preferred name	identifier
reference	z-coordinate of the reference point	AAF395-001
refresh	refresh time	AAF331-006
refresh	refresh time interval	AAF331-006
register	register type	AAF234-005
registers	number of internal registers	AAF230-005
regulation	regulation voltage	AAE324-005
rejection	common mode rejection ratio	AAE374-005
rejection	common-mode rejection ratio	AAF160-005
rejection	power supply rejection ratio	AAF170-005
rejection	supply voltage rejection ratio	AAF170-005
relation	phase relation	AAE885-005
relative	relative humidity	AAE859-005
relative	relative humidity RH_1	AAE954-005
relative	relative humidity RH_2	AAE953-005
relative	stress relative humidity	AAF279-002
release	release time	AAE924-005
release	release voltage (ac)	AAF050-005
release	release voltage (dc)	AAF129-005
reliability	test reliability code	AAD153-001
reluctivity	temperature factor of reluctivity	AAF307-005
remanence	remanence	AAF292-005
remanent	remanent flux density	AAF292-005
removal	removal time	AAF219-005
repetitive	repetitive peak forward current	AAE293-005
repetitive	repetitive peak input voltage	AAE290-005
repetitive	repetitive peak off-state voltage	AAE739-005
repetitive	repetitive peak on-state current	AAE729-005
repetitive	repetitive peak output current	AAE287-005
repetitive	repetitive peak recovery current	AAE297-005
repetitive	repetitive peak reverse current	AAE297-005
repetitive	repetitive peak reverse power	AAE302-005
repetitive	repetitive peak reverse voltage	AAE300-005
requirement	connection requirement	AAD091-001
requirement	connection requirement code	AAD006-001
residual	PTC residual current	AAE629-005
resistance	base-emitter resistance	AAE906-005
resistance	common-mode input resistance	AAF164-005
resistance	contact resistance	AAE920-005
resistance	contact-circuit resistance	AAE920-005
resistance	dark resistance	AAE123-005
resistance	dc resistance	AAF090-005
resistance	dc resistance	AAF245-005
resistance	differential input resistance	AAF163-005
resistance	differential resistance	AAE323-005
resistance	differential resistance	AAE328-005
resistance	diode forward resistance	AAE310-005
resistance	diode reverse resistance	AAE311-005
resistance	diode series resistance	AAE310-005
resistance	diode series resistance	AAE311-005
resistance	drain-source off-state resistance	AAE394-005
resistance	drain-source on-state resistance	AAE391-005
resistance	drain-source on-state resistance	AAE393-005
resistance	equivalent series resistance	AAE064-005
resistance	field coil resistance	AAE610-005
resistance	insulation resistance	AAE063-005
resistance	insulation resistance	AAE155-005
resistance	insulation resistance	AAF349-001
resistance	insulation resistance	AAJ087-001
resistance	light resistance	AAE124-005
resistance	line coil resistance	AAE609-005
resistance	load resistance	AAE212-005
resistance	negative resistance tolerance	AAF452-001
resistance	output resistance	AAF165-005
resistance	positive resistance tolerance	AAF453-001
resistance	PTC switching resistance	AAE626-005
resistance	reference resistance	AAE874-005
resistance	resistance	AAE119-005
resistance	resistance	AAF450-001
resistance	resistance	AAF457-001
resistance	resistance	AAE956-005
resistance	resistance at 25 Cel	AAE127-005
resistance	resistance dependency	AAE122-005
resistance	resistance element material	AAE116-005
resistance	resistance law (IEC)	AAE141-005
resistance	resistance ratio R_Tamb/R_Tref	AAE875-005
resistance	resistance tolerance	AAF100-005
resistance	symmetric resistance tolerance	AAF451-001
resistance	thermal resistance	AAE688-005
resistance	thermal resistance type	AAE689-005
resistance	tolerance of TC of resistance	AAJ013-001
resistance	toleranced resistance	AAF463-001
resistive	resistive material	AAE116-005
resistivity	resistivity	AAE760-005
resistor	linearity of a fixed resistor	AAE114-007
resistor	resistor interconnection	AAF102-005
resistor	resistor noise index	AAE621-005
resistor	single resistor type	AAJ003-001
resolution	horizontal resolution	AAE806-005
resolution	vertical resolution	AAF205-005
resonance	fundamental resonance frequency	AAE050-005
resonance	lowest resonance frequency	AAE050-005
resonance	resonance frequency	AAE050-005
resonance	resonance frequency	AAF052-005
resonant	resonant frequency	AAJ089-001
resonator	resonator type	AAJ088-001
response	conformity of frequency response	AAE706-005
response	flatness of frequency response	AAE706-005
response	response level	AAE528-005
response	spectral response lower limit	AAE573-005
response	spectral response upper limit	AAE574-005
response	total response time	AAF168-005
response	wavelength at peak response	AAE568-005
responsivity	responsivity	AAE571-005
responsivity	voltage responsivity	AAE571-005
retention	data retention current	AAF332-005
retention	data retention voltage	AAF333-005
return	input return losses	AAE701-005
return	output return losses	AAE702-005
reverse	continuous direct reverse current	AAE276-005
reverse	crest working reverse voltage	AAE299-005
reverse	diode reverse resistance	AAE311-005
reverse	non-rep peak reverse current	AAE315-005
reverse	non-rep peak reverse power diss	AAE303-006
reverse	non-rep peak reverse power diss	AAE327-006
reverse	non-rep peak reverse power diss	AAF389-001
reverse	non-repetitive peak reverse current	AAE318-005
reverse	non-repetitive peak reverse voltage	AAE301-005

keyword	full preferred name	identifier
reverse	repetitive peak reverse current	AAE297-005
reverse	repetitive peak reverse power	AAE302-005
reverse	repetitive peak reverse voltage	AAE300-005
reverse	reverse current	AAE276-005
reverse	reverse current	AAE994-005
reverse	reverse current dark	AAF144-005
reverse	reverse current light	AAF143-005
reverse	reverse gate current	AAE372-005
reverse	reverse recovery time	AAE281-005
reverse	reverse recovery time (I)	AAF301-005
reverse	reverse voltage	AAE277-005
reverse	reverse voltage	AAE335-005
reverse	total reverse recovery time	AAE306-005
reverse	working reverse voltage	AAE299-005
ripple	ripple current	AAE960-005
rise	output rise time	AAE238-005
rise	rate of rise commutating voltage	AAE741-005
rise	rate of rise of commut current	AAE735-005
rise	rate of rise of gate current	AAE736-005
rise	rate of rise of off-state volt	AAE727-005
rise	rate of rise of off-state voltage	AAE740-005
rise	rate of rise of on-state curr	AAE684-005
rise	rate of rise on-state current	AAE734-005
rise	rise time	AAE976-005
rise	rise time	AAF058-005
rise	rise time	AAE225-005
ROM	ROM programmability	AAF236-005
rotation	angle of mechanical rotation	AAE173-005
rotation	direction of rotation	AAE188-005
rotation	rotation torque	AAJ015-001
rotation	total mechanical rotation	AAE173-005
rotor	rotor inertia	AAE189-005
row	lead row spacing	AAG053-001
row	lead row spacing	AAG080-001
row	number of contacts per row	AAF150-005
row	terminal row spacing	AAG053-001
row	terminal row spacing	AAG080-001
row	terminal row spacing	AAG087-001
row	terminal row splay	AAG088-001
rows	number of rows	AAE360-005
safety	safety approval	AAE149-005
safety	safety class	AAE036-005
sat	collector-emitter sat voltage	AAE416-005
sat	collector-emitter sat voltage	AAE551-005
saturation	base-emitter saturation voltage	AAF114-005
saturation	collector saturation current	AAE641-005
saturation	saturation field strength	AAF290-005
saturation	saturation flux density	AAF308-005
scale	scale	AAF396-001
screen	screen curvature radius	AAE804-005
screen	screen diagonal	AAE592-005
screen	screen shape	AAF271-005
screen	useful screen horizontal	AAE593-005
screen	useful screen vertical	AAE594-005
screening	screening	AAF047-005
sealing	sealing	AAE508-005
sealing	sealing	AAJ072-001
sealing	sealing class	AAJ018-001
seated	seated height	AAE027-005
seated	seated height	AAG001-001
seating	terminal seating angle	AAG052-001
secondary	number of secondary coils	AAF099-005
secondary	secondary electrochemical system	AAE532-005
secondary	secondary overall length	AAG101-001
secondary	secondary terminal length	AAG099-001
sections	number of sections	AAE996-005
semi	semi angle	AAF416-001
sensitivity	open-circuit sensitivity	AAE862-005
sensitivity	sensitivity	AAE861-005
sensitivity	sensitivity	AAE865-005
sensitivity	sensitivity	AAF193-005
sensitivity	spectral sensitivity	AAE567-005
sensitivity	supply voltage sensitivity	AAF161-005
sensitivity	thermal sensitivity index B25/75	AAE616-005
sensitivity	thermal sensitivity index B25/85	AAE132-005
sensitivity	thermal sensitivity tolerance	AAF282-005
sensor	sensor input quantity	AAE892-005
sensor	sensor working principle	AAE893-005
separating	separating force	AAF046-005
separation	element separation	AAE575-005
separation	mounting hole separation	AAG042-001
separation	separation	AAE151-005
sequence	drawing sequence code	AAG104-001
sequence	termination count sequence	AAG072-001
series	diode series resistance	AAE310-005
series	diode series resistance	AAE311-005
series	E series	AAE030-005
series	equivalent series resistance	AAE064-005
series	number of cells in series	AAE940-005
set	instruction set	AAF324-005
set	instruction set architecture	AAF222-005
settling	settling time	AAF168-005
set-up	address set-up time	AAJ098-001
set-up	clock set-up time	AAJ102-001
set-up	input set-up time	AAJ100-001
set-up	set-up time	AAF212-005
sex	contact sex	AAE353-005
sex	sex of contacts	AAE353-005
sex	sex of guides	AAE353-005
shaft	shaft diameter	AAJ070-001
shaft	shaft length	AAJ069-001
shaft	shaft style	AAJ068-001
shape	body shape	AAF344-001
shape	conductor shape	AAF242-006
shape	connector shape	AAE356-005
shape	core shape	AAE766-005
shape	pad shape	AAD024-001
shape	pulse shape	AAE622-006
shape	screen shape	AAF271-005
shape	shape of flange	AAE061-005
shape	terminal cross-section shape	AAF376-001
shape	terminal shape	AAE007-005
shape	terminal shape code	AAG058-001
shape	terminal shape non-SMD	AAF347-001
shape	terminal shape SMD	AAF348-001
shape/size	shape/size code BSI	AAE259-005
shelf	shelf life	AAE041-005
shelf	shelf life	AAE942-005
shell	shell material	AAE351-006
shell	shell type	AAF467-001
short-circuit	output short-circuit current	AAF207-005
short-circuit	short-circuit input capacitance	AAE982-005
short-circuit	short-circuit output capacitance	AAE983-005
short-term	leakage current short-term	AAE042-005
shoulder	shoulder length	AAG065-001
shoulder	shoulder thickness	AAG006-001
shoulder	shoulder width	AAG005-001
signal	signal direction	AAD022-001
signal	signal handling type	AAE971-007
signal	signal name	AAD019-001
signal	signal transformer type	AAJ075-001

keyword	full preferred name	identifier
signal	signal type	AAD020-001
signal	signal type	AAE077-005
signal	signal type	AAE785-005
signal	spurious signal level	AAE880-005
signal	spurious signal level (2-tau)	AAE888-005
signal	spurious signal level (3-tau)	AAE879-005
simultaneity	simultaneity factor	AAF436-001
single	single resistor type	AAJ003-001
sink	output sink current	AAE254-005
sites	number of bond sites	AAD018-001
size	addressable storage size	AAF228-005
size	bump size	AAD122-001
size	case size	AAF388-001
size	conductor size AWG	AAF244-005
size	core size code	AAE765-005
size	increment size	AAE805-005
size	peripheral word size	AAF330-005
size	potentiometer size	AAJ014-001
size	size code	AAJ008-001
size	size code EIA	AAF353-001
size	size tolerance	AAD117-001
size	storage size	AAE474-005
size	tube size (cm)	AAE595-005
size	tube size (inch)	AAF272-005
size	wafer size	AAD011-001
size	word size	AAE459-005
slew	slew rate	AAF162-005
slide	slide force	AAJ020-001
slide	slide length	AAJ019-001
slope	slope cable equivalent	AAE705-005
slug	slug diameter	AAG102-001
slug	slug width	AAG103-001
small	small terminal type	AAJ032-001
smaller	smaller flange radius	AAG084-001
small-signal	small-signal current gain	AAE410-005
small-signal	small-signal unity gain	AAF166-005
SMD	terminal exit position SMD	AAF345-001
SMD	terminal shape SMD	AAF348-001
socket	power socket type	AAJ030-001
socket	socket type	AAF148-005
socket	socket type	AAJ028-001
socket	tube socket type	AAJ029-001
socket-inlet	socket-inlet	AAE345-005
soft	soft magnetic material grade	AAE764-005
sound	output sound pressure level	AAF193-005
source	die data source	AAD142-001
source	output source current	AAE255-005
source	source cut-off current	AAE373-005
source	source document identification	AAG067-001
source	source document page	AAG068-001
source	source impedance	AAE936-005
source-substrate	source-substrate voltage	AAE388-005
source-substrate	source-substrate voltage limit	AAE387-005
space	gross space	AAF400-001
space	net space	AAF399-001
spacing	angular terminal spacing	AAG049-001
spacing	angular terminal spacing	AAG050-001
spacing	bent terminal spacing	AAG091-001
spacing	bent terminal spacing	AAG105-001
spacing	dot spacing	AAE986-005
spacing	inner tape spacing	AAF267-005
spacing	lead row spacing	AAG053-001
spacing	lead row spacing	AAG080-001
spacing	lead spacing	AAG017-001
spacing	stand-off spacing	AAG015-001
spacing	terminal row spacing	AAG053-001
spacing	terminal row spacing	AAG080-001
spacing	terminal row spacing	AAG087-001
spacing	terminal spacing	AAG017-001

keyword	full preferred name	identifier
spark	spark distance	AAE158-005
spark	spark gap	AAE158-005
spark	spark gap type	AAJ081-001
specific	specific capacitance	AAE990-005
specific	specific current consumption	AAE845-005
specific	specific total loss	AAF300-005
specification	CECC specification	AAE347-005
specification	MIL specification	AAF370-001
specification	temperature specification	AAD133-001
spectral	spectral bandwidth	AAE557-005
spectral	spectral response lower limit	AAE573-005
spectral	spectral response upper limit	AAE574-005
spectral	spectral sensitivity	AAE567-005
speed	rated speed	AAE195-005
speed	speed	AAE524-005
speed	speed	AAF049-005
speed	speed	AAE193-005
speed	synchronous speed	AAE194-005
sphere	sphere radius	AAF417-001
spindle	spindle diameter	AAE148-005
spindle	spindle length	AAE147-005
spindle	spindle material	AAE145-005
spindle	spindle material of potentiometer	AAE145-005
splay	terminal row splay	AAG088-001
spot	hot spot temperature	AAE115-005
spot	spot noise factor	AAE648-005
spot	spot noise factor	AAE657-005
spot	spot noise figure	AAE648-005
spot	spot noise figure	AAE657-005
spread	angular terminal spread	AAG051-001
spring	contact spring material	AAF125-005
spurious	spurious signal level	AAE880-005
spurious	spurious signal level (2-tau)	AAE888-005
spurious	spurious signal level (3-tau)	AAE879-005
squared	I squared t for fusing	AAE305-005
stability	stability	AAE907-005
stability	stability after test	AAF097-005
stability	stability test	AAF096-005
stable	number of stable positions	AAE929-005
stable	stable positions	AAE929-005
stack	EHT stack application	AAE503-005
standard	international standard	AAE012-005
standard	national standard	AAF043-005
standard	normal standard deviation	AAF366-001
standard	standard package code	AAG070-001
standards	standards document reference	AAG071-001
standby	standby current	AAF336-005
standby	standby current chip disabled	AAF336-005
standby	standby current disabled	AAE692-005
standby	standby current enabled	AAE693-005
standing	input standing wave ratio	AAE974-005
standing	output standing wave ratio	AAE975-005
standing	voltage standing wave ratio	AAJ041-001
stand-off	reverse voltage	AAE335-005
stand-off	stand-off diameter	AAG007-001
stand-off	stand-off height	AAG002-001
stand-off	stand-off length	AAG065-001
stand-off	stand-off major dimension	AAG005-001
stand-off	stand-off minor dimension	AAG006-001
stand-off	stand-off spacing	AAG015-001
stand-off	stand-off voltage	AAE277-005
starting	starting torque	AAE196-005
starting	starting torque	AAE199-005
state	unprogrammed state	AAF235-005
state	virginity state	AAF235-005
status	component status	AAE965-005
step	die step dimension x	AAD070-001

keyword	full preferred name	identifier
step	die step dimension y	AAD071-001
step	step angle	AAE208-005
step	step length	AAF061-005
stepping	stepping rate	AAE209-005
stop	lever stop force	AAJ021-001
storage	addressable storage size	AAF228-005
storage	carrier storage time	AAF055-005
storage	storage capacity	AAE474-005
storage	storage function	AAE722-007
storage	storage humidity	AAE858-005
storage	storage life	AAE942-005
storage	storage size	AAE474-005
storage	storage temperature	AAE841-005
storage	storage type	AAF334-005
strength	dielectric strength	AAF251-005
strength	field strength at (BH)_max	AAF289-005
strength	magnetic field strength	AAE863-005
strength	magnetic field strength	AAF284-005
strength	peak magnetic field strength	AAE767-005
strength	saturation field strength	AAF290-005
stress	junction stress temperature	AAF275-002
stress	stress ambient free air temper	AAF278-002
stress	stress ambient temperature	AAF278-002
stress	stress relative humidity	AAF279-002
stress	stress temperature max	AAF277-002
stress	stress temperature min	AAF276-002
stress	virtual junction stress temper	AAF275-002
stroke	stroke length	AAJ019-001
structure	bus structure	AAF221-005
structure	structure	AAJ009-001
stud	non-threaded stud length	AAG133-001
stud	stud length	AAG095-001
stud	stud thread	AAG096-001
stud	stud thread diameter	AAG093-002
studs	number of studs	AAF373-001
style	connecting style	AAJ038-001
style	coupling style	AAJ038-001
style	package style code	AAG057-001
style	shaft style	AAJ068-001
style	termination style	AAJ037-001
sub-class	dielectric sub-class 1	AAE266-005
sub-class	dielectric sub-class 2	AAE076-005
substrate	substrate connection	AAD007-001
substrate	substrate connection	AAD093-001
substrate	substrate length	AAE870-005
substrate	substrate material	AAD005-001
substrate	substrate temperature	AAE868-005
substrate	substrate width	AAE871-005
suffix	drawing suffix	AAG104-001
supplier	die supplier	AAD141-001
supply	dc supply current	AAE691-005
supply	dc supply voltage	AAE086-005
supply	dc supply voltage	AAE690-005
supply	HIGH-state supply current	AAE901-005
supply	LOW-state supply current	AAE902-005
supply	off-state supply current	AAE903-005
supply	output current EHT supply	AAE282-005
supply	output current focus supply	AAE283-005
supply	output voltage EHT supply	AAE289-005
supply	pad supply current	AAD033-001
supply	power supply rejection ratio	AAF170-005
supply	quiescent supply current	AAE896-005
supply	supply current	AAD054-001
supply	supply current	AAE691-005
supply	supply current	AAE901-005
supply	supply current	AAE902-005
supply	supply current	AAE903-005
supply	supply current type	AAE178-005
supply	supply form	AAD087-001
supply	supply form code	AAD056-001
supply	supply form description	AAD088-001
supply	supply name	AAD049-001
supply	supply packing	AAD089-001
supply	supply packing code	AAD055-001
supply	supply packing description	AAD090-001
supply	supply variability	AAD031-001
supply	supply voltage	AAD032-001
supply	supply voltage	AAE163-005
supply	supply voltage	AAE690-005
supply	supply voltage	AAE102-005
supply	supply voltage	AAE547-005
supply	supply voltage limit	AAE086-005
supply	supply voltage rejection ratio	AAF170-005
supply	supply voltage sensitivity	AAF161-005
surface	case temperature	AAE260-005
surface	die surface	AAD081-001
surface	maximum surface temperature	AAE115-005
surface-mount	surface-mount flag	AAG073-001
surge	non-repetitive surge current	AAE298-005
surge	surge current	AAJ086-001
surge	surge on-state current	AAE730-005
surge	surge voltage	AAJ054-001
susceptance	susceptance	AAF461-001
swap	swap codes	AAD023-001
swapability	swapability indicator	AAF358-001
swing	output voltage swing	AAF158-005
switch	switch actuation	AAE931-006
switch	switch temperature	AAE138-005
switch	switch type	AAJ047-001
switching	hysteresis in switching distance	AAE869-005
switching	PTC switching resistance	AAE626-005
switching	switching frequency	AAE872-005
switching	switching function	AAE506-005
switching	switching temperature	AAE138-005
switching	switching time	AAE235-005
switching	switching time	AAE238-005
switching	travel in switching distance	AAE869-005
symmetric	symmetric capacitance tolerance	AAF447-001
symmetric	symmetric resistance tolerance	AAF451-001
symmetric	symmetric tolerance	AAF443-001
sync	sync output power	AAE704-005
synchronism	ac motor synchronism	AAE183-005
synchronous	synchronous output power	AAE714-005
synchronous	synchronous speed	AAE194-005
system	magnetisation system	AAE174-005
system	numeral system	AAE457-005
system	primary electrochemical system	AAE531-005
system	secondary electrochemical system	AAE532-005
tag	tag hole diameter	AAG118-001
tag	tag hole diameter	AAG119-001
tag	tag hole diameter	AAG120-001
tag	tag hole distance	AAG121-001
tag	tag hole distance	AAG122-001
tag	tag hole distance	AAG123-001
tag	tag hole width	AAG117-001
tangent	tangent of loss angle	AAE065-005
tape	inner tape spacing	AAF267-005
taping	taping	AAE112-005
TC	tolerance of TC of resistance	AAJ013-001
TCR	TCR tolerance	AAJ013-001
technology	diode technology	AAE489-005
technology	electrode technology	AAE031-005
technology	encapsulation technology	AAE262-005

keyword	full preferred name	identifier
technology	IC technology	AAE686-005
technology	transistor technology	AAE401-005
temp	temp coef input offset current	AAF153-005
temp	temp coef input offset voltage	AAF156-005
temper	stress ambient free air temper	AAF278-002
temper	virtual junction stress temper	AAF275-002
temperature	ambient temperature	AAE891-005
temperature	ambient temperature	AAE014-005
temperature	capacitance change with temperature	AAJ057-001
temperature	case temperature	AAE260-005
temperature	category temperature	AAE891-005
temperature	category temperature	AAJ056-001
temperature	colour temperature	AAE623-005
temperature	Curie temperature	AAE761-005
temperature	EIA temperature characteristic	AAE037-005
temperature	heatsink temperature	AAE400-005
temperature	hot spot temperature	AAE115-005
temperature	junction stress temperature	AAF275-002
temperature	junction temperature	AAE337-005
temperature	junction temperature	AAE271-005
temperature	maximum assembly temperature	AAD149-001
temperature	maximum body temperature	AAE115-005
temperature	maximum surface temperature	AAE115-005
temperature	mounting base temperature	AAE336-005
temperature	mounting base temperature	AAE272-005
temperature	rated temperature	AAE267-005
temperature	rated temperature	AAJ055-001
temperature	reference temperature	AAE017-005
temperature	storage temperature	AAE841-005
temperature	stress ambient temperature	AAF278-002
temperature	stress temperature max	AAF277-002
temperature	stress temperature min	AAF276-002
temperature	substrate temperature	AAE868-005
temperature	switch temperature	AAE138-005
temperature	switching temperature	AAE138-005
temperature	temperature	AAE685-005
temperature	temperature coefficient	AAE113-005
temperature	temperature coefficient	AAE876-005
temperature	temperature coefficient	AAF350-001
temperature	temperature coefficient (cap)	AAE067-005
temperature	temperature coefficient Br	AAF297-005
temperature	temperature coefficient code	AAE035-005
temperature	temperature coefficient H_cJ	AAF291-005
temperature	temperature coefficient S_F	AAE329-005
temperature	temperature coefficient S_Z	AAE322-005
temperature	temperature factor of permeability	AAF307-005
temperature	temperature factor of reluctivity	AAF307-005
temperature	temperature specification	AAD133-001
temperature	temperature T_1	AAE958-005
temperature	temperature T_2	AAE959-005
temperature	temperature type	AAE683-005
temperature	tie point temperature	AAE326-005
temperature	virtual junction temperature	AAE337-005
temperatures	test temperatures	AAD133-001
terminal	actual terminal number	AAG059-001
terminal	angular terminal spacing	AAG049-001
terminal	angular terminal spacing	AAG050-001
terminal	angular terminal spread	AAG051-001
terminal	bent terminal spacing	AAG091-001
terminal	bent terminal spacing	AAG105-001
terminal	index terminal length	AAG115-001
terminal	main terminal length	AAG098-001
terminal	quantity of terminal positions	AAG037-001

keyword	full preferred name	identifier
terminal	quantity of terminal positions	AAG109-001
terminal	quantity of terminal positions	AAG110-001
terminal	secondary terminal length	AAG099-001
terminal	small terminal type	AAJ032-001
terminal	terminal array type	AAJ033-001
terminal	terminal breadth	AAF338-001
terminal	terminal circle diameter	AAG004-001
terminal	terminal connection type	AAF435-001
terminal	terminal count	AAD145-001
terminal	terminal cross-section shape	AAF376-001
terminal	terminal diameter	AAE023-005
terminal	terminal diameter	AAG009-001
terminal	terminal diameter	AAG010-001
terminal	terminal diameter	AAG011-001
terminal	terminal emergence dimension	AAG041-001
terminal	terminal emergence height	AAG040-001
terminal	terminal exit position non-SMD	AAF346-001
terminal	terminal exit position SMD	AAF345-001
terminal	terminal identifier	AAF357-001
terminal	terminal length	AAE072-005
terminal	terminal length	AAG029-001
terminal	terminal length	AAG030-001
terminal	terminal length	AAG031-001
terminal	terminal length	AAG032-001
terminal	terminal length	AAG033-001
terminal	terminal length	AAG034-001
terminal	terminal length	AAG077-001
terminal	terminal length	AAG111-001
terminal	terminal length	AAG129-001
terminal	terminal length beside housing	AAF053-005
terminal	terminal material	AAE634-005
terminal	terminal pattern	AAG107-001
terminal	terminal pitch	AAE024-005
terminal	terminal placement	AAE008-005
terminal	terminal position code	AAG056-001
terminal	terminal reference position	AAG044-001
terminal	terminal reference position	AAG045-001
terminal	terminal reference position	AAG108-001
terminal	terminal reference position	AAG112-001
terminal	terminal reference position	AAG113-001
terminal	terminal row spacing	AAG053-001
terminal	terminal row spacing	AAG080-001
terminal	terminal row spacing	AAG087-001
terminal	terminal row splay	AAG088-001
terminal	terminal seating angle	AAG052-001
terminal	terminal shape	AAE007-005
terminal	terminal shape code	AAG058-001
terminal	terminal shape non-SMD	AAF347-001
terminal	terminal shape SMD	AAF348-001
terminal	terminal spacing	AAG017-001
terminal	terminal thickness	AAF339-001
terminal	terminal thickness	AAG012-001
terminal	terminal thread	AAG097-001
terminal	terminal thread diameter	AAG094-002
terminal	terminal type	AAJ031-001
terminal	terminal variant code	AAG054-001
terminal	terminal width	AAG008-001
terminal	terminal width	AAG076-001
terminals	number of potential terminals	AAG037-001
terminals	number of terminals	AAE139-005
terminals	number of terminals	AAE754-005
terminals	quantity of missing terminals	AAG038-001
terminal-to-contact	terminal-to-contact angle	AAE352-005
termination	actual quantity of termination	AAG059-001
termination	termination count sequence	AAG072-001
termination	termination identifier	AAD012-001
termination	termination number	AAD012-001

keyword	full preferred name	identifier
termination	termination style	AAJ037-001
test	die test level code	AAD008-001
test	stability after test	AAF097-005
test	stability test	AAF096-005
test	test flow	AAD132-001
test	test maturity code	AAD154-001
test	test name	AAD082-001
test	test options	AAD134-001
test	test procedure description	AAD060-001
test	test reliability code	AAD153-001
test	test temperatures	AAD133-001
test	test voltage coefficient	AAF369-001
test	test voltage minimum	AAF251-005
thermal	thermal drift gate-source voltage	AAE389-005
thermal	thermal resistance	AAE688-005
thermal	thermal resistance type	AAE689-005
thermal	thermal sensitivity index B25/75	AAE616-005
thermal	thermal sensitivity index B25/85	AAE132-005
thermal	thermal sensitivity tolerance	AAF282-005
thermal	thermal time constant	AAE131-005
thermal	thermal time-constant (power)	AAJ073-001
thermistor	NTC thermistor type	AAJ004-001
thermistor	thermistor current	AAE625-005
thermistor	thermistor type	AAE126-005
thickness	card thickness	AAJ040-001
thickness	circuit board thickness	AAJ040-001
thickness	die thickness	AAD072-001
thickness	flange thickness	AAG019-001
thickness	lead thickness	AAG012-001
thickness	package thickness	AAG003-001
thickness	printed board thickness	AAE362-005
thickness	shoulder thickness	AAG006-001
thickness	terminal thickness	AAF339-001
thickness	terminal thickness	AAG012-001
thickness	thickness	AAD072-001
thickness	thickness tolerance	AAD118-001
thickness	wafer thickness	AAD072-001
thread	stud thread	AAG096-001
thread	stud thread diameter	AAG093-002
thread	terminal thread	AAG097-001
thread	terminal thread diameter	AAG094-002
threshold	gate-source threshold voltage	AAE384-005
threshold	negative-going threshold	AAF209-005
threshold	positive-going threshold	AAF208-005
thyristor	thyristor function	AAE743-005
tie-point	tie point temperature	AAE326-005
tie-point	tie-point distance	AAE937-005
time	access time	AAE720-005
time	access time from address	AAJ091-001
time	access time from CAS	AAE721-005
time	access time from clock	AAJ092-001
time	access time from RAS	AAE720-005
time	access time from RAS	AAJ095-001
time	address hold time	AAJ099-001
time	address set-up time	AAJ098-001
time	bounce time	AAE930-005
time	burst-mode cycle time	AAJ093-001
time	carrier storage time	AAF055-005
time	charge time	AAE943-005
time	clock hold time	AAJ103-001
time	clock set-up time	AAJ102-001
time	commutated turn-off time	AAE747-005
time	delay (off) time	AAE981-005
time	delay (off) time	AAF055-005
time	delay (on) time	AAE980-005
time	delay (on) time	AAF056-005

keyword	full preferred name	identifier
time	delay time	AAE231-005
time	delay time	AAE543-005
time	delay time	AAF056-005
time	duration	AAE028-005
time	fall time	AAE746-005
time	fall time	AAE977-005
time	fall time	AAF057-005
time	fall time	AAE904-005
time	fuse pre-arcing time	AAJ034-001
time	fusing time	AAJ049-001
time	HIGH to LOW delay time	AAE233-005
time	HIGH to LOW propagation time	AAE233-005
time	HIGH to LOW transition time	AAE235-005
time	hold time	AAF213-005
time	input hold time	AAJ101-001
time	input set-up time	AAJ100-001
time	LOW to HIGH delay time	AAE237-005
time	LOW to HIGH propagation time	AAE237-005
time	LOW to HIGH transition time	AAE238-005
time	mechanical time constant	AAE187-005
time	operate time	AAE923-005
time	output data-valid time	AAF232-005
time	output disable time	AAF215-005
time	output enable time	AAF214-005
time	output fall time	AAE235-005
time	output hold time	AAJ104-001
time	output rise time	AAE238-005
time	phase delay time	AAE544-005
time	random read/write cycle time	AAJ094-001
time	recovery time	AAF219-005
time	refresh time	AAF331-006
time	refresh time interval	AAF331-006
time	release time	AAE924-005
time	removal time	AAF219-005
time	reverse recovery time	AAE281-005
time	reverse recovery time (I)	AAF301-005
time	rise time	AAE976-005
time	rise time	AAF058-005
time	rise time	AAE225-005
time	settling time	AAF168-005
time	set-up time	AAF212-005
time	switching time	AAE235-005
time	switching time	AAE238-005
time	thermal time constant	AAE131-005
time	time constant	AAE746-005
time	time constant (of capacitor)	AAE066-005
time	time t_1	AAF312-005
time	time t_2	AAF313-005
time	total response time	AAF168-005
time	total reverse recovery time	AAE306-005
time	transition time	AAJ105-001
time	turn-off time	AAE553-005
time	turn-off time	AAE847-005
time	turn-off time	AAE979-005
time	turn-off time	AAF059-005
time	turn-on time	AAE554-005
time	turn-on time	AAE846-005
time	turn-on time	AAE978-005
time	turn-on time	AAF060-005
time	virtual front time	AAE332-005
time	virtual time to half-value	AAE333-005
time-constant	thermal time-constant (power)	AAJ073-001
tolerance	B_25/85 tolerance	AAF282-005
tolerance	breakdown voltage tolerance	AAJ083-001
tolerance	bump height tolerance	AAD147-001
tolerance	capacitance lower tolerance	AAE269-001
tolerance	capacitance lower tolerance (%)	AAE018-001

keyword	full preferred name	identifier
tolerance	capacitance tolerance	AAE071-005
tolerance	capacitance upper tolerance	AAE268-001
tolerance	capacitance upper tolerance (%)	AAE047-001
tolerance	ganging tolerance	AAE146-005
tolerance	inductance tolerance	AAJ077-001
tolerance	inductance tolerance (%)	AAJ076-001
tolerance	negative capacitance tolerance	AAF448-001
tolerance	negative resistance tolerance	AAF452-001
tolerance	negative tolerance	AAF444-001
tolerance	percentage tolerance	AAF443-001
tolerance	positive capacitance tolerance	AAF449-001
tolerance	positive resistance tolerance	AAF453-001
tolerance	positive tolerance	AAF445-001
tolerance	resistance tolerance	AAF100-005
tolerance	size tolerance	AAD117-001
tolerance	symmetric capacitance tolerance	AAF447-001
tolerance	symmetric resistance tolerance	AAF451-001
tolerance	symmetric tolerance	AAF443-001
tolerance	TCR tolerance	AAJ013-001
tolerance	thermal sensitivity tolerance	AAF282-005
tolerance	thickness tolerance	AAD118-001
tolerance	tolerance of TC of resistance	AAJ013-001
toleranced	toleranced capacitance	AAF462-001
toleranced	toleranced resistance	AAF463-001
toleranced	toleranced values	AAF442-001
tool	tool type	AAF466-001
torque	breakdown torque	AAE201-005
torque	holding torque	AAE207-005
torque	max load torque	AAE191-005
torque	max working torque	AAE191-005
torque	maximum work torque	AAE201-005
torque	pull-in torque	AAE202-005
torque	pull-out torque	AAE201-005
torque	rated torque	AAE191-005
torque	rotation torque	AAJ015-001
torque	starting torque	AAE196-005
torque	starting torque	AAE199-005
torque	torque	AAE192-005
torus	major radius of torus	AAF421-001
torus	minor radius of torus	AAF422-001
total	specific total loss	AAF300-005
total	total loss volume density	AAF300-005
total	total mechanical rotation	AAE173-005
total	total power loss	AAE775-005
total	total radiant output power	AAF065-005
total	total response time	AAF168-005
total	total reverse recovery time	AAE306-005
trajectory	trajectory of motion	AAE179-005
transducer	transducer attenuation	AAE887-005
transducer	transducer principle	AAE005-006
transfer	current transfer ratio	AAE548-005
transfer	difference in transfer impedance	AAE717-005
transfer	transfer admittance	AAE396-005
transfer	transfer capacitance	AAE390-005
transfer	transfer capacitance	AAE421-005
transfer	transfer conductance	AAE656-005
transformer	power transformer application	AAF098-005
transformer	signal transformer type	AAJ075-001
transformer	transformer model	AAE167-005
transient	non-repetitive transient current	AAE298-005
transistor	transistor package	AAE637-005
transistor	transistor polarity	AAE638-005
transistor	transistor technology	AAE401-005

keyword	full preferred name	identifier
transition	HIGH to LOW transition time	AAE235-005
transition	LOW to HIGH transition time	AAE238-005
transition	transition frequency	AAE425-005
transition	transition time	AAJ105-001
transmission	colour TV transmission	AAE442-005
transmission	glass transmission	AAE596-005
transmission	light transmission	AAE596-005
travel	angular travel	AAJ066-001
travel	differential travel	AAE869-005
travel	travel	AAF132-005
travel	travel	AAJ065-001
travel	travel in switching distance	AAE869-005
trigger	cathode-gate trigger voltage	AAE750-005
trigger	gate trigger current	AAE732-005
trigger	gate trigger voltage	AAE742-005
trigger	trigger device function	AAE724-005
trip	trip current	AAE136-005
triple	composite triple beat	AAE699-005
tube	tube size (cm)	AAE595-005
tube	tube size (inch)	AAF272-005
tube	tube socket type	AAJ029-001
tube	tube type	AAE696-005
turn-off	commutated turn-off time	AAE747-005
turn-off	turn-off time	AAE553-005
turn-off	turn-off time	AAE847-005
turn-off	turn-off time	AAE979-005
turn-off	turn-off time	AAF059-005
turn-on	turn-on time	AAE554-005
turn-on	turn-on time	AAE846-005
turn-on	turn-on time	AAE978-005
turn-on	turn-on time	AAF060-005
TV	colour TV transmission	AAE442-005
type	peripheral type	AAF335-005
type	storage type	AAF334-005
type	temperature type	AAE683-005
type	thermal resistance type	AAE689-005
UL	UL flammability	AAF126-005
under	contact length under housing	AAE363-005
underfill	underfill	AAD126-001
unilateral	unilateral power gain	AAE713-005
unit	drive unit type	AAE005-006
units	geometric units	AAD115-001
unity	small-signal unity gain	AAF166-005
unity-gain	unity-gain frequency	AAF166-005
unprogrammed	unprogrammed state	AAF235-005
upper	capacitance upper tolerance	AAE268-001
upper	capacitance upper tolerance (%)	AAE047-001
upper	diode upper capacitance	AAF303-005
upper	spectral response upper limit	AAE574-005
upper	upper frequency	AAE156-005
upper	upper rated frequency	AAE339-005
useful	useful screen horizontal	AAE593-005
useful	useful screen vertical	AAE594-005
value	absolute value of admittance	AAF459-001
value	absolute value of impedance	AAF456-001
value	B_25/75 value	AAE616-005
value	B_25/85 value	AAE132-005
value	collector current peak value	AAE407-005
value	max range value	AAF360-001
value	min range value	AAF361-001
value	normal average value	AAF365-001
value	Poisson expectation value	AAF368-001
value	Poisson variance value	AAF367-001
values	beamwidth between 50 % values	AAE558-005
values	toleranced values	AAF442-001
variability	supply variability	AAD031-001
variable	number of variable elements	AAE172-005
variable	variable capacitor type	AAJ002-001

keyword	full preferred name	identifier
variable	variable inductor type	AAJ078-001
variance	Poisson variance value	AAF367-001
variant	body variant code	AAG055-001
variant	terminal variant code	AAG054-001
varistor	non-rep varistor peak current	AAE298-005
varistor	varistor capacitance	AAE429-005
varistor	varistor voltage at 1 mA	AAE334-005
version	die version	AAD003-001
vertex	vertex number	AAD028-001
vertex	vertex x-coordinate	AAD029-001
vertex	vertex y-coordinate	AAD030-001
vertical	useful screen vertical	AAE594-005
vertical	vertical resolution	AAF205-005
vertices	number of polygon vertices	AAD027-001
view	geometric view	AAD144-001
view	project view code	AAF392-001
view	reference view	AAF356-001
viewing	preferred viewing direction	AAE991-005
viewing	viewing angle	AAE993-005
viewing	viewing area height	AAE855-005
viewing	viewing area length	AAE854-005
virginity	virginity state	AAF235-005
virtual	junction temperature	AAE271-005
virtual	virtual front time	AAE332-005
virtual	virtual junction stress temper	AAF275-002
virtual	virtual junction temperature	AAE337-005
virtual	virtual time to half-value	AAE333-005
voltage	ac voltage	AAE045-005
voltage	anode voltage	AAE590-005
voltage	anode voltage limiting	AAF315-005
voltage	anode-gate to anode voltage	AAE751-005
voltage	base-emitter saturation voltage	AAF114-005
voltage	base-emitter voltage	AAE427-005
voltage	breakback voltage	AAE726-005
voltage	breakdown voltage	AAF302-005
voltage	breakdown voltage tolerance	AAJ083-001
voltage	breakover voltage	AAE725-005
voltage	category voltage	AAJ053-001
voltage	cathode voltage	AAE591-005
voltage	cathode voltage for cut-off	AAE591-005
voltage	cathode voltage for cut-off	AAE603-005
voltage	cathode-gate trigger voltage	AAE750-005
voltage	clamping voltage	AAE313-005
voltage	collector-base voltage	AAE419-005
voltage	collector-base voltage V_CBO	AAE417-005
voltage	collector-emitter breakdown voltage	AAF066-005
voltage	collector-emitter peak voltage	AAE415-005
voltage	collector-emitter sat voltage	AAE416-005
voltage	collector-emitter sat voltage	AAE551-005
voltage	collector-emitter voltage	AAE412-005
voltage	collector-emitter voltage V_CE	AAE413-005
voltage	collector-emitter voltage V_CE	AAE414-005
voltage	collector-emitter voltage V_CE	AAF113-005
voltage	common-mode input voltage	AAF157-005
voltage	common-mode input voltage range	AAF157-005
voltage	connector rated voltage	AAJ042-001
voltage	contact voltage (ac)	AAE512-005
voltage	contact voltage (dc)	AAF107-005
voltage	control grid voltage	AAE578-005
voltage	crest working input voltage	AAE292-005
voltage	crest working reverse voltage	AAE299-005
voltage	data retention voltage	AAF333-005
voltage	dc breakdown voltage	AAJ082-001
voltage	dc supply voltage	AAE086-005

keyword	full preferred name	identifier
voltage	dc supply voltage	AAE690-005
voltage	dc voltage component	AAE843-005
voltage	difference base-emitter voltage	AAE418-005
voltage	differential voltage change	AAE644-005
voltage	drain-gate voltage	AAE375-005
voltage	drain-source voltage	AAE376-005
voltage	drain-source voltage limit	AAE377-005
voltage	drain-substrate voltage	AAE378-005
voltage	drain-substrate voltage limit	AAE379-005
voltage	drive voltage	AAE992-005
voltage	driving voltage	AAE184-005
voltage	emitter-base voltage V_EBO	AAF112-005
voltage	energising voltage (ac)	AAE916-005
voltage	energising voltage (dc)	AAE915-005
voltage	equivalent input noise voltage	AAE380-005
voltage	equivalent noise voltage	AAE380-005
voltage	final accelerator voltage	AAE590-005
voltage	focusing voltage	AAE585-005
voltage	focusing voltage	AAE586-005
voltage	focusing voltage limiting	AAF314-005
voltage	forward voltage	AAE279-005
voltage	forward voltage	AAE499-005
voltage	gate trigger voltage	AAE742-005
voltage	gate-source cut-off voltage	AAE386-005
voltage	gate-source threshold voltage	AAE384-005
voltage	gate-source voltage	AAE381-005
voltage	gate-source voltage difference	AAE383-005
voltage	gate-source voltage limit	AAF118-005
voltage	grid 1 voltage for cut-off	AAE578-005
voltage	grid 2 voltage	AAF206-005
voltage	grid 2 voltage for cut-off	AAE584-005
voltage	heater voltage	AAE579-005
voltage	HIGH-level input voltage	AAE718-005
voltage	HIGH-level output voltage	AAE092-005
voltage	HIGH-level output voltage	AAE093-005
voltage	HIGH-state input voltage	AAE718-005
voltage	HIGH-state output voltage	AAE092-005
voltage	HIGH-state output voltage ref	AAE093-005
voltage	input offset voltage	AAF155-005
voltage	input voltage	AAE163-005
voltage	input voltage	AAE224-005
voltage	input voltage HIGH	AAE718-005
voltage	input voltage limit	AAE210-005
voltage	input voltage LOW	AAE719-005
voltage	input voltage peak-to-peak	AAE288-005
voltage	insulation voltage	AAE513-005
voltage	isolation voltage min	AAE550-005
voltage	large-signal voltage gain	AAF159-005
voltage	limiting contact voltage	AAE513-005
voltage	limiting element voltage (ac)	AAF281-005
voltage	limiting element voltage (dc)	AAE118-005
voltage	limiting voltage (ac)	AAF281-005
voltage	limiting voltage (dc)	AAE118-005
voltage	LOW-level input voltage	AAE719-005
voltage	LOW-level output voltage	AAE094-005
voltage	LOW-level output voltage	AAE097-005
voltage	LOW-state input voltage	AAE719-005
voltage	LOW-state output voltage	AAE097-005
voltage	LOW-state output voltage ref	AAE094-005
voltage	max change rate output voltage	AAF162-005
voltage	max peak voltage at I_class	AAE319-005
voltage	maximum clamping voltage	AAE319-005
voltage	maximum noise voltage	AAE338-005
voltage	maximum operating voltage	AAJ061-001
voltage	minimum breakdown voltage	AAF251-005

keyword	full preferred name	identifier
voltage	no-load output voltage	AAE164-005
voltage	nominal voltage	AAE519-005
voltage	non-repetitive peak reverse voltage	AAE301-005
voltage	off-state voltage	AAE738-005
voltage	off-state voltage	AAE737-005
voltage	on-state voltage	AAE279-005
voltage	open-circuit voltage	AAE529-005
voltage	operating voltage	AAE992-005
voltage	operating voltage	AAE842-005
voltage	output voltage	AAE169-005
voltage	output voltage	AAE698-005
voltage	output voltage	AAE726-005
voltage	output voltage	AAE228-005
voltage	output voltage EHT supply	AAE289-005
voltage	output voltage HIGH	AAE092-005
voltage	output voltage HIGH	AAE093-005
voltage	output voltage LOW	AAE094-005
voltage	output voltage peak-to-peak	AAF158-005
voltage	output voltage swing	AAF158-005
voltage	programming voltage	AAF238-005
voltage	rate of rise commutating voltage	AAE741-005
voltage	rate of rise of off-state volt	AAE727-005
voltage	rate of rise of off-state voltage	AAE740-005
voltage	rated input voltage (ac)	AAE184-005
voltage	rated input voltage (dc)	AAE186-005
voltage	rated input voltage (pulse)	AAE204-005
voltage	rated operational voltage (ac)	AAE512-005
voltage	rated operational voltage (dc)	AAF107-005
voltage	rated voltage	AAJ010-001
voltage	rated voltage	AAJ060-001
voltage	rated voltage (ac)	AAE045-005
voltage	rated voltage (dc)	AAE044-005
voltage	reference voltage	AAE324-005
voltage	regulation voltage	AAE324-005
voltage	release voltage (ac)	AAF050-005
voltage	release voltage (dc)	AAF129-005
voltage	repetitive peak input voltage	AAE290-005
voltage	repetitive peak off-state voltage	AAE739-005
voltage	repetitive peak reverse voltage	AAE300-005
voltage	reverse voltage	AAE277-005
voltage	reverse voltage	AAE335-005
voltage	rms input voltage	AAE291-005
voltage	source-substrate voltage	AAE388-005
voltage	source-substrate voltage limit	AAE387-005
voltage	stand-off voltage	AAE277-005
voltage	supply voltage	AAD032-001
voltage	supply voltage	AAE163-005
voltage	supply voltage	AAE690-005
voltage	supply voltage	AAE102-005
voltage	supply voltage	AAE547-005
voltage	supply voltage limit	AAE086-005
voltage	supply voltage rejection ratio	AAF170-005
voltage	supply voltage sensitivity	AAF161-005
voltage	surge voltage	AAJ054-001
voltage	temp coef input offset voltage	AAF156-005
voltage	test voltage coefficient	AAF369-001
voltage	test voltage minimum	AAF251-005
voltage	thermal drift gate-source voltage	AAE389-005
voltage	varistor voltage at 1 mA	AAE334-005
voltage	voltage (ac)	AAE150-005
voltage	voltage (dc)	AAE013-005
voltage	voltage application	AAE033-005
voltage	voltage at class current (IEC)	AAE319-005
voltage	voltage drop	AAF123-005
voltage	voltage during charge	AAE941-005
voltage	voltage handling capacity	AAE338-005
voltage	voltage responsivity	AAE571-005
voltage	voltage standing wave ratio	AAJ041-001
voltage	voltage V_1	AAE961-005
voltage	voltage V_2	AAE962-005
voltage	withstanding voltage	AAJ085-001
voltage	working reverse voltage	AAE299-005
voltage	working voltage	AAE324-005
voltage	working voltage	AAF258-005
volume	total loss volume density	AAF300-005
wafer	wafer size	AAD011-001
wafer	wafer thickness	AAD072-001
wave	input standing wave ratio	AAE974-005
wave	output standing wave ratio	AAE975-005
wave	voltage standing wave ratio	AAJ041-001
wavelength	peak-emission wavelength	AAE556-005
wavelength	peak-response wavelength	AAE568-005
wavelength	wavelength at peak emission	AAE556-005
wavelength	wavelength at peak response	AAE568-005
wavelength	wavelength at peak value	AAE569-005
wedge	wedge x-size	AAF423-001
wedge	wedge y-size	AAF424-001
wedge	wedge z-size	AAF425-001
width	address bus width	AAF226-005
width	data bus width	AAF227-005
width	die width	AAD071-001
width	fiducial width	AAD158-001
width	flange overall width	AAG086-001
width	flange width	AAG114-001
width	hexagon width	AAG131-001
width	I/O bus width	AAF328-005
width	index width	AAG027-001
width	lead width	AAG008-001
width	lead width	AAG076-001
width	lid width	AAG082-001
width	mounted width	AAG036-001
width	overall width	AAG024-001
width	package width	AAG016-001
width	package width zone	AAG021-001
width	pad width	AAD026-001
width	pulse width HIGH	AAF216-005
width	pulse width LOW	AAF217-005
width	shoulder width	AAG005-001
width	slug width	AAG103-001
width	substrate width	AAE871-005
width	tag hole width	AAG117-001
width	terminal width	AAG008-001
width	terminal width	AAG076-001
winding	winding configuration	AAE151-005
window	metastable window	AAF218-005
wire	wire application	AAF262-005
withdrawal	withdrawal force	AAF046-005
withstanding	withstanding voltage	AAJ085-001
word	peripheral word size	AAF330-005
word	word length	AAE459-005
word	word size	AAE459-005
words	number of words	AAE474-005
work	maximum work torque	AAE201-005
working	crest working input voltage	AAE292-005
working	crest working reverse voltage	AAE299-005
working	max working torque	AAE191-005
working	peak working current	AAE317-005
working	sensor working principle	AAE893-005
working	working current	AAE316-005
working	working current	AAE500-005
working	working peak forward current	AAE296-005
working	working principle	AAE877-005
working	working reverse voltage	AAE299-005
working	working voltage	AAE324-005

keyword	full preferred name	identifier
working	working voltage	AAF258-005
x-axis	angle axis to x-axis	AAF411-001
x-axis	centre of gravity (x-axis)	AAF362-001
x-axis	number of pitches (x-axis)	AAF374-001
x-axis	offset (x-axis)	AAF341-001
x-axis	pitch (x-axis)	AAF321-001
x-coor	x-coor preferred mounting position	AAF401-001
x-coor	x-coor preferred mounting position	AAF402-001
x-coordinate	x-coordinate of centre	AAF418-001
x-coordinate	x-coordinate of the reference point	AAF393-001
x-coordinate	x-coordinate position location	AAF406-001
x-position	die centre x-position	AAD129-001
x-size	wedge x-size	AAF423-001
y/x	mounting deviation y/x	AAF405-001
y/z	mounting deviation y/z	AAF404-001
y-axis	angle axis to y-axis	AAF412-001
y-axis	centre of gravity (y-axis)	AAF363-001
y-axis	number of pitches (y-axis)	AAF375-001
y-axis	offset (y-axis)	AAF340-001
y-axis	pitch (y-axis)	AAF322-001
y-coordinate	y-coordinate of centre	AAF419-001
y-coordinate	y-coordinate of the reference point	AAF394-001
y-coordinate	y-coordinate position location	AAF407-001
yield	die yield	AAD009-001
yield	die yield code	AAD095-001
y-position	die centre y-position	AAD130-001
y-size	wedge y-size	AAF424-001
z-axis	angle axis to z-axis	AAF413-001
z-coor	z-coor preferred mounting position	AAF403-001
z-coordinate	z-coordinate of centre	AAF420-001
z-coordinate	z-coordinate of the reference point	AAF395-001
z-coordinate	z-coordinate position location	AAF408-001
zone	flange zone height	AAG018-001
zone	height zone	AAG124-001
zone	package diameter zone	AAG022-001
zone	package height zone	AAG092-001
zone	package length zone	AAG020-001
zone	package width zone	AAG021-001
z-size	wedge z-size	AAF425-001

Annex G
(informative)

Outlines

G.1 Outline style

The first level of classification has a code formed from the two-letter outline style code as in Table G.1 below (derived from IEC 60191-4).

Table G.1 – Outline style codes

Code	Name	Description
BD	Bead	A package in spherical or almost spherical shape
CC	Chip carrier	A low-profile package whose chip cavity or mounting area occupies a major portion of the package area and whose terminals consist of metal pad surfaces (on the leadless version) or leads formed around the sides and under the package or out from the package (on leaded versions). NOTE 1 The body of the chip carrier, usually square or of low aspect ratio, is similar to that of a flatpack package NOTE 2 When leads extend out from the package, the preferred name is flatpack (see FP)
CP	Clamped	Package, for high current devices, in the form of a cylinder with a plane, circular, high current terminal at each end, intended to be clamped against or between two busbars acting as heatsinks.
CY	Cylinder/can	Generally cylindrical package. It usually has terminals that exit from one end, parallel to the central axis of the package and is mounted perpendicular to the seating plane.
DB	Disc/Button	Low-profile package that looks like a disk or button. It usually has terminals that exit radially from the periphery of the package like the spokes of a wheel or from the disk centre. Terminals may be formed into a variety of shapes.
FM	Flange-mount	Package that has a flange-mounted heat sink that is an integral part of the package and provides mechanical mounting to a packaging interconnect structure or cold plate. It usually has terminals that exit from, or attach to, any surface of the package in a variety of forms.
FO	Fibre-optic	Microcircuit package that has one or more fibre-optic connectors. Its terminals may exit from, or attach to, any surface of the package and may be formed in a variety of lead shapes. NOTE The fibre-optic connectors are considered to be terminals.
FP	Flatpack	Low-profile package whose leads project parallel to, and are designed primarily to be attached parallel to, the seating plane. NOTE 1 The leads originate typically at either two or four sides of a package. NOTE 2 The body of the flatpack is similar to that of a chip carrier. NOTE 3 Leads may be formed generally away from the package body. If the leads are formed back towards the package body, the correct term is "chip carrier" (see CC).
GA	Grid array	Low-profile package whose terminals are located on one surface in a matrix of at least three rows and three columns; terminals may be missing from some row-column intersections.
IL	In-line	Rectangular package having one row or two or more parallel rows of leads designed primarily for insertion mounting perpendicular to the seating plane. NOTE 1 The leads may all emerge from a single side or from two parallel sides with the leads formed to produce parallel rows. NOTE 2 The preferred code is "IP".

IP	In-line	Rectangular package having one row or two or more parallel rows of leads designed primarily for insertion mounting perpendicular to the seating plane. NOTE 1 The leads may all emerge from a single side or from two parallel sides with the leads formed to produce parallel rows. NOTE 2 Restrict to DIP/SIP/ZIP
LF	Long-form	Cylindrical or elliptical tubular package having terminal end-caps or axial leads. Its long-form body is usually mounted parallel to the mounting plane.
MA	Microelectronic	Assembly of unpackaged (uncased) microcircuits and/or packaged microcircuits, which may also include discrete devices, so constructed on a packaging interconnect structure that for the purpose of specification, testing, commerce, and maintenance, the package is considered to be an indivisible component. The passive and/or active discrete and microelectronic devices may be mounted on either one or two sides of the packaging interconnect structure, and the external terminals usually exit from one side of the assembly. A variety of package sizes, shapes, and external terminal forms are possible.
MP	Power module	Package designed for housing two or more power semiconductor chips having a mounting base which is not a terminal, and several screw and/or fast-on or pin terminals on the surface opposite the mounting base
MW	Microwave	Package specially designed to provide device operation at microwave frequencies. NOTE "Specially designed" includes, but is not limited to, microwave cavities or terminals with controlled common-element impedance.
PF	Press-fit	Round or elliptical package whose mechanical mounting area is pressed into the packaging interconnect structure or cold plate for purposes of thermal and electrical connection. Its external terminals may take on a variety of forms.
PM	Post mount	Package whose mechanical mounting device is a threaded stud, threaded hole, or post for mounting to the packaging and interconnect structure or cold plate. A variety of package shapes and external terminal forms are possible.
RC?	Rectangular	A package whose body is in the form of a rectangular box
SO*	Small outline	Low-profile rectangular surface-mount component package. Its chip (die) is bonded to an inner land contact area, primarily a lead frame. External terminals exit parallel to the seating plane on two opposite sides of the moulded, flat package. NOTE 1 The lead form is usually gull wing but other lead forms are possible. NOTE 2 This term is deprecated in favour of "chip carrier" (see CC) or "flatpack" (see FP), depending on the lead form.
SS	Special-shape	Miniature component package whose devices require a special shape. Its terminals may project from one or more surfaces
UC	Uncased	Uncased, microminiature chip (die). Usually the chip has bonding pads, bumps, etc., that are bonded to pads or lands on a lead-frame, tape, or substrate.
VP	Vertical surface mount	Surface-mount package intended to be mounted perpendicular to the seating plane. Terminals are located in one or more parallel rows. The package may include supporting posts (for insertion through the seating surface) or pedestals (for attachment to the seating surface).
XA-XZ	Non-defined family	Electronic device package that does not fall under any of the other IEC-approved package-style families. NOTE These vendor- or user-specified package-outline-style codes are temporary and should later be replaced with an IEC-approved code. They may be reused and so have no unique, fixed meanings.

* Industry practice sometimes uses "P" for "package" in the location normally occupied by this field (except that there is no preceding hyphen) for example SOP.

G.2 Terminal position

The classification code for the second level is the single letter code for the terminal disposition, as in Table G.2 below (derived from IEC 60191-4).

Table G.2 – Terminal position codes

Code	Name	Description
A	Axial	Terminals extend from both ends in the direction of the major axis of a cylindrical or elliptical package
B	Bottom	Terminals extend from the bottom of the package
D	Double	Terminals are on opposite sides of a square or rectangular package or located in two parallel rows
E	End	Terminals are package endcaps having a circular or elliptical cross-section
L	Lateral	Terminals are on the four sides of a square or rectangular package. The preferred name is "quad", code **Q**
P	Perpendicular	Terminals are perpendicular to the seating plane on a square or rectangular package. Restrict to PGA family
Q	Quad	Terminals are on four sides of a square or rectangular package or located in four parallel rows
R	Radial	Terminals extended radially from the periphery of a cylindrical or spherical package
S	Single	Terminals are on one surface of a square or rectangular package in a single row
T	Triple	Terminals are on three sides of a square or rectangular package
U	Upper	Terminals are perpendicular to and opposite the seating plane, and are on one surface of a package
X	Other	Terminal positions are other than those described
Z	Zigzag	Terminals are on one surface of a square or rectangular package arranged in a staggered configuration

1) These descriptions assume the seating plane in the bottom of the package.

2) Reference to package shape does not take into account flanges, notches or other irregularities.

G.3 Terminal form

The classification code for the third level is formed by the single-letter terminal form code from Table G.3 below (derived from IEC 60191-4).

Table G.3 – Terminal form codes

Code	Form	Description
A	Screw	A threaded hole for a screw on the top of the package
B	Butt or ball	A short lead or solder ball intended for attachment perpendicular to the land structure
C	"C" bend	A "C"-shaped compliant or non-compliant lead bent down and under the body of the package
D	Solder lug	A lug terminal on the package
E	Fast-on plug	A fast-on plug extending from the body of the package
F	Flat	A compliant or non-compliant, non-formed flat lead that extends away from the body of the package
G	Gull-wing	A compliant lead bent down from the body of the package with a foot at the end pointing away from the package
H	High-current cable	A lug terminal at the end of a flexible lead
I	Insulated	A flat lead formed by depositing a thin conductor on a supporting insulating film
J	"J" bend	A "J"-shaped compliant lead bent down and back under the body of the package
L	"L" bend	An "L"-shaped compliant lead intended for surface mounting
N	No lead	Metallized terminal pads located on the body of the package
P*	Pin or peg	A tempered lead extending from the body of the package and intended for attachment to a plated through-hole in the land structure
Q	Quik-connect	A tab-like terminal extending from the body of the package
R	Wraparound	A metallized non-compliant terminal wrapped around the package body
S	"S" bend	An "S"-shaped compliant lead bent under the body of the package
T	Through-hole	A terminal with flat or V-shaped cross-section intended for attachment to a plated through-hole in the land structure
U	Inverted "J"	A "J"-shaped compliant or non-compliant lead bent down from the body of the package with the curved end pointing away from the package
W	Wire	An untempered wire lead extending from the body of the package
X	Other	A lead form or terminal shape other than those defined
Y	Screw	A threaded hole

* Industry practice sometimes uses "P" for "package" in the location normally occupied by this field (except that there is no preceding hyphen) for example SOP.

G.4 Terminal variants

The classification code for the fourth level is formed by the four-character terminal variant code from Table G.4 below.

Table G.4 – Terminal variant codes

Code	Description
T000	Standard form
T001	Straight leads
T002	Formed leads
T003	Leads on circle
T004	Straight leads in-line
T005	Formed leads in-line
T006	Leads on square grid
T007	Offset leads
T008	Straight tags
T009	Round pins
T010	Rectangular pins
T011	Straight flat leads
T012	Solder balls
T013	One fixed tag
T014	Two fixed tags
T015	One lead with tag
T016	Two leads with tag
T017	Three leads with tag
T018	One lead without tag
T019	Strip leads
T020	Multiple leads
T021	Three leads
T022	Two leads, stub and tab
T023	Straight V-section leads

G.5 Body variants

The classification code for the fifth level is formed by the four-character body variant code from Table G.5 below.

Table G.5 – Body variant codes

Code	Description
B000	Standard form
B001	Bumped package
B002	Non-bumped package
B003	Plain cylinder
B004	Top-hat package
B005	Clamp-mount
B006	Stud-mount
B007	Cavity up
B008	Cavity down
B009	Non-cavity package (moulded)
B010	Cavity package (ceramic)

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Q2 Please tell us in what capacity(ies) you bought the standard *(tick all that apply).* I am the/a:

purchasing agent ❑
librarian ❑
researcher ❑
design engineer ❑
safety engineer ❑
testing engineer ❑
marketing specialist ❑
other.....

Q3 I work for/in/as a: *(tick all that apply)*

manufacturing ❑
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other.....

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product research ❑
product design/development ❑
specifications ❑
tenders ❑
quality assessment ❑
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technical documentation ❑
thesis ❑
manufacturing ❑
other.....

Q5 This standard meets my needs: *(tick one)*

not at all ❑
nearly ❑
fairly well ❑
exactly ❑

Q6 If you ticked NOT AT ALL in Question 5 the reason is: *(tick all that apply)*

standard is out of date ❑
standard is incomplete ❑
standard is too academic ❑
standard is too superficial ❑
title is misleading ❑
I made the wrong choice ❑
other .....

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(2) below average,
(3) average,
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both English and French texts ❑

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