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**Types normalisés d'éléments de données
avec plan de classification pour
composants électriques –**

**Partie 4:
Collection de référence CEI des types
normalisés d'éléments de données,
des classes de composants et des termes**

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

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



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Les termes et définitions figurant dans la présente publication ont été soit tirés du VEI, soit spécifiquement approuvés aux fins de cette publication.

Symboles graphiques et littéraux

Pour les symboles graphiques, les symboles littéraux et les signes d'usage général approuvés par la CEI, le lecteur consultera:

- la CEI 27: *Symboles littéraux à utiliser en électrotechnique*;
- la CEI 417: *Symboles graphiques utilisables sur le matériel. Index, relevé et compilation des feuilles individuelles*;
- la CEI 617: *Symboles graphiques pour schémas*;

et pour les appareils électromédicaux,

- la CEI 878: *Symboles graphiques pour équipements électriques en pratique médicale*.

Les symboles et signes contenus dans la présente publication ont été soit tirés de la CEI 27, de la CEI 417, de la CEI 617 et/ou de la CEI 878, soit spécifiquement approuvés aux fins de cette publication.

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Published yearly
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The terms and definitions contained in the present publication have either been taken from the IEV or have been specifically approved for the purpose of this publication.

Graphical and letter symbols

For graphical symbols, and letter symbols and signs approved by the IEC for general use, readers are referred to publications:

- IEC 27: *Letter symbols to be used in electrical technology*;
- IEC 417: *Graphical symbols for use on equipment. Index, survey and compilation of the single sheets*;
- IEC 617: *Graphical symbols for diagrams*;

and for medical electrical equipment,

- IEC 878: *Graphical symbols for electromedical equipment in medical practice*.

The symbols and signs contained in the present publication have either been taken from IEC 27, IEC 417, IEC 617 and/or IEC 878, or have been specifically approved for the purpose of this publication.

IEC publications prepared by the same technical committee

The attention of readers is drawn to the end pages of this publication which list the IEC publications issued by the technical committee which has prepared the present publication.

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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SOMMAIRE

	Pages
AVANT-PROPOS	4
 Articles	
1 Généralités	8
1.1 Domaine d'application et objet	8
1.2 Références normatives	8
1.3 Références informatives	10
2 Définitions	10
3 Méthodologie de maintenance et de validation	10
4 Types d'éléments de données	12
4.1 Attributs de spécification d'un type d'élément de données	12
4.2 Définitions d'un type d'élément de données	12
4.2.1 Index des symboles littéraux et/ou abréviations	14
4.2.2 Index des mots clés des noms préférés et des noms synonymes	14
5 Classes de composants	16
5.1 Principes de classification des composants	16
5.2 Attributs de classes de composants	16
5.3 Tableaux de classification de composants	18
5.4 Définitions de classes de composants	18
5.4.1 Index des noms préférés	18
6 Termes	18
6.1 Attributs de termes	18
6.2 Définitions de termes	20
6.2.1 Index des mots clés	20
6.2.2 Index d'abréviations	22
 Annexes	
A Définitions des types d'éléments de données	25
B Index des symboles littéraux et/ou abréviations des types d'éléments de données	119
C Index des mots clés des noms préférés et des noms synonymes des types d'éléments de données	137
D Tableaux de classification	159
E Définitions des classes de composants	165
F Index des noms préférés	187
G Définitions des termes	190
H Index des mots clés de termes	229
J Index des abréviations de termes	233
K Documents de référence pour la définition des types d'éléments de données, classes de composants et termes	235

CONTENTS

	Page
FOREWORD	5
Clause	
1 General	9
1.1 Scope and object	9
1.2 Normative references	9
1.3 Informative references	11
2 Definitions	11
3 Maintenance and validation methodology	11
4 Data element types	13
4.1 Data element type specification attributes	13
4.2 Data element type definitions	13
4.2.1 Index on letter symbol and/or short name	15
4.2.2 Index on keywords from the preferred names and synonymous names	15
5 Component classes	17
5.1 Component classification principles	17
5.2 Component class attributes	17
5.3 Component classification tables	19
5.4 Component class definitions	19
5.4.1 Index on preferred names	19
6 Terms	19
6.1 Term attributes	19
6.2 Term definitions	21
6.2.1 Index on keywords	21
6.2.2 Index on abbreviations	23
Annexes	
A Data element type definitions	25
B Index on letter symbol and/or short name of data element types	119
C Index on keywords from the preferred names and synonymous names of data element types	137
D Classification tables	159
E Component class definitions	165
F Index on preferred names	187
G Term definitions	191
H Index on keywords in terms	229
J Index on abbreviations of terms	233
K Documents referenced to in the definition of data element types, component classes and terms	235

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

TYPES NORMALISÉS D'ÉLÉMENTS DE DONNÉES AVEC PLAN DE CLASSIFICATION POUR COMPOSANTS ÉLECTRIQUES — Partie 4: Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes

AVANT-PROPOS

- 1) La CEI (Commission Electrotechnique Internationale) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de la CEI). La CEI a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, la CEI entre autres activités, publie des Normes internationales. Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec la CEI, participent également aux travaux. La CEI collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
- 2) Les décisions ou accords officiels de la CEI concernant les questions techniques représentent, dans la mesure du possible un accord international sur les sujets étudiés, étant donné que les Comités nationaux intéressés sont représentés dans chaque comité d'études.
- 3) Les documents produits se présentent sous la forme de recommandations internationales. Ils sont publiés comme normes, rapports techniques ou guides et agréés comme tels par les Comités nationaux.
- 4) Dans le but d'encourager l'unification internationale, les Comités nationaux de la CEI s'engagent à appliquer de façon transparente, dans toute la mesure possible, les Normes internationales de la CEI dans leurs normes nationales et régionales. Toute divergence entre la norme de la CEI et la norme nationale ou régionale correspondante doit être indiquée en termes clairs dans cette dernière.
- 5) La CEI n'a fixé aucune procédure concernant le marquage comme indication d'approbation et sa responsabilité n'est pas engagée quand un matériel est déclaré conforme à l'une de ses normes.
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La Norme internationale CEI 61360-4 a été établie par le sous-comité 3D: Ensembles de données pour bibliothèques de composants électriques, du comité d'étude 3 de la CEI: Documentation et symboles graphiques.

Le texte de cette norme est issu des documents suivantes:

FDIS	Rapport de vote
3D/48/FDIS	3D/51/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**STANDARD DATA ELEMENT TYPES WITH ASSOCIATED
CLASSIFICATION SCHEME FOR ELECTRIC COMPONENTS —
Part 4 : IEC reference collection of standard data element types,
component classes and terms**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organisation for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61360-4 has been prepared by subcommittee 3D: Data sets for libraries of electric component data of IEC technical committee 3: Documentation and graphical symbols.

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

FDIS	Report on voting
3D/48/FDIS	3D/51/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.

La CEI 61360 comprend les parties suivantes, présentées sous le titre général Types normalisés d'éléments de données avec plan de classification pour composants électriques:

Partie 1 : Définitions - Principes et méthodes

Partie 2 : Schéma d'un dictionnaire EXPRESS

Partie 3 : Procédures de validation et de maintenance

Partie 4 : Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes

Les annexes A, B, C, D, E, F, G, H et J font partie intégrante de cette norme.

L'annexe K est donnée uniquement à titre d'information.

Il est envisagé que cette IS soit la dernière édition comme une copie papier mais on estime que les amendements ultérieurs qui comprendront les types d'éléments de données ajoutés par les agences de validation et de maintenance entraîneront un volume tel que la masse des informations ne pourra être fournie que sous une forme adaptée à l'ordinateur.

Withdrawn

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, component classes and terms.

Annexes A, B, C, D, E, F, G, H and J form an integral part of this standard.

Annex K is for information only.

It is envisaged that this IS issue will be the last one as hard copy, but that subsequent amendments which will include data element types added by the validation and maintenance agencies will result in such a large volume that the bulk of the information will only be supplied in a computer sensible form.

Withdrawn

TYPES NORMALISÉS D'ÉLÉMENTS DE DONNÉES AVEC PLAN DE CLASSIFICATION POUR COMPOSANTS ÉLECTRIQUES —

Partie 4: Collection de référence CEI des types normalisés d'éléments de données, des classes de composants et des termes

1 Généralités

1.1 *Domaine d'application et objet*

La présente partie de la CEI 61360 spécifie trois dictionnaires :

- les définitions des types d'éléments de données pour les composants électriques et les matériaux utilisés dans les équipements et systèmes électrotechniques;
- les définitions des classes de composants avec le plan de classification associé;
- les définitions des termes utilisées pour expliciter le présent schéma de classification et les termes utilisés dans les définitions des types d'éléments de données qui pourraient éventuellement être mal comprises.

Ces définitions concernent les composants électriques, y compris les composants électroniques et électromécaniques et les matériaux utilisés dans les équipements et systèmes électrotechniques.

L'objet de la présente norme est de fournir un jeu de types d'éléments de données à identification unique avec

- une signification définie non ambiguë;
- un format de valeur défini, et
- un domaine de valeur prescrit pour les types d'éléments de données non quantitatifs.

Le schéma de classification des composants, les définitions des classes de composants (où les propriétés caractéristiques appropriées et valides par types d'éléments de données spécifiques sont assignées à chaque classe de composants) et les définitions des termes sont utilisés pour définir les types d'éléments de données de façon non ambiguë et pour permettre la gestion du jeu complet de types d'éléments de données.

La collection de types d'éléments de données de la présente Norme internationale est destinée à être utilisée dans les systèmes informatisés pour le choix et la gestion des composants, le traitement des nomenclatures de pièces et la conception, la fabrication et les essais assistés par ordinateur.

1.2 *Références normatives*

Les documents normatifs suivants contiennent des dispositions qui, par suite de la référence qui y est faite, constituent des dispositions valables pour la présente partie de la CEI 61360. Au moment de la publication, les éditions indiquées étaient en vigueur. Toute document normatif est sujet à révision et les parties prenantes aux accords fondés sur la présente partie de la CEI 61360 sont invitées à rechercher la possibilité d'appliquer les éditions les plus récentes des documents normatifs indiqués ci-après. Les membres de la CEI et de l'ISO possèdent le registre des Normes internationales en vigueur.

CEI 61360-1: 1995,

Types normalisés d'éléments de données avec plan de classification pour composants électriques — Partie 1: Définitions - Principes et méthodes

CEI 3D/38/CDV

Types normalisés d'éléments de données avec plan de classification pour composants électriques — Partie 2: Schéma de dictionnaire EXPRESS (future CEI 61360-2)

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

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

1 General

1.1 Scope and object

This part of IEC 61360 specifies within three 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;
- the definitions of the terms used to clarify this classification scheme and those terms used in the data element type definitions which could possibly be misunderstood.

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) and the terms definitions 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 International 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 normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61360. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this part of 1360 are encouraged to investigate the possibility of applying the most recent editions of the normative documents below. Members of and ISO maintain registers of currently valid International Standards.

IEC 61360-1: 1995,	<i>Standard data element types with associated classification scheme for electric components — Part 1: Definitions - Principles and methods</i>
IEC 3D/38/CDV	<i>Standard data element types with associated classification scheme for electric components — Part 2: EXPRESS dictionary schema (future IEC 61360-2)</i>

CEI 61360-3: 1995, *Types normalisés d'éléments de données avec plan de classification pour composants électriques — Partie 3 : Procédures de validation et de maintenance*

1.3 Références informatives

Toutes les références mentionnées dans les définitions des entités du présent document sont listées dans l'annexe informative K.

2 Définitions

Pour les besoins de la présente partie de la CEI 61360, les définitions données à l'article 2 de la CEI 61360-1 ainsi que les définitions de l'annexe G s'appliquent.

3 Méthodologie de maintenance et de validation

La collection des entités telle qu'elle est définie dans la présente norme est une collection dynamique qui nécessite d'être tenue à jour.

La CEI 61360-3 spécifie les procédures qui doivent être suivies par l'Agence de Validation et l'Agence de Maintenance du vocabulaire CEI des types normalisés d'éléments de données techniques avec plan de classification associé, classes de composants telles qu'elles sont définies par le plan de classification et termes associés avec la signification de valeur des types d'éléments de données de classification utilisés pour expliciter le plan de classification et les termes utilisés dans les définitions des types d'éléments de données qui pourraient éventuellement être mal compris.

Withholding

IEC 61360-3: 1995, *Standard data element types with associated classification scheme for electric components — Part 3: Maintenance and validation procedures*

1.3 Informative references

All mentioned references in the definitions of the entities in this document are listed in the informative annex K.

2 Definitions

For the purpose of this part of IEC 61360, the definitions as given in clause 2 of IEC 61360-1 as well as those given in annex G apply.

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, component classes as defined by this classification scheme and terms associated with the value meaning of classifying data element types used to clarify the classification scheme and those terms used in the data element type definitions which could possibly be misunderstood.

Withhold

4 Types d'éléments de données

4.1 Attributs de spécification d'un type d'élément de données

Les différents attributs des types d'éléments de données sont expliqués à l'aide de la figure 1. Pour une description détaillée des différents attributs des définitions des types d'éléments de données, voir la CEI 61360-1.

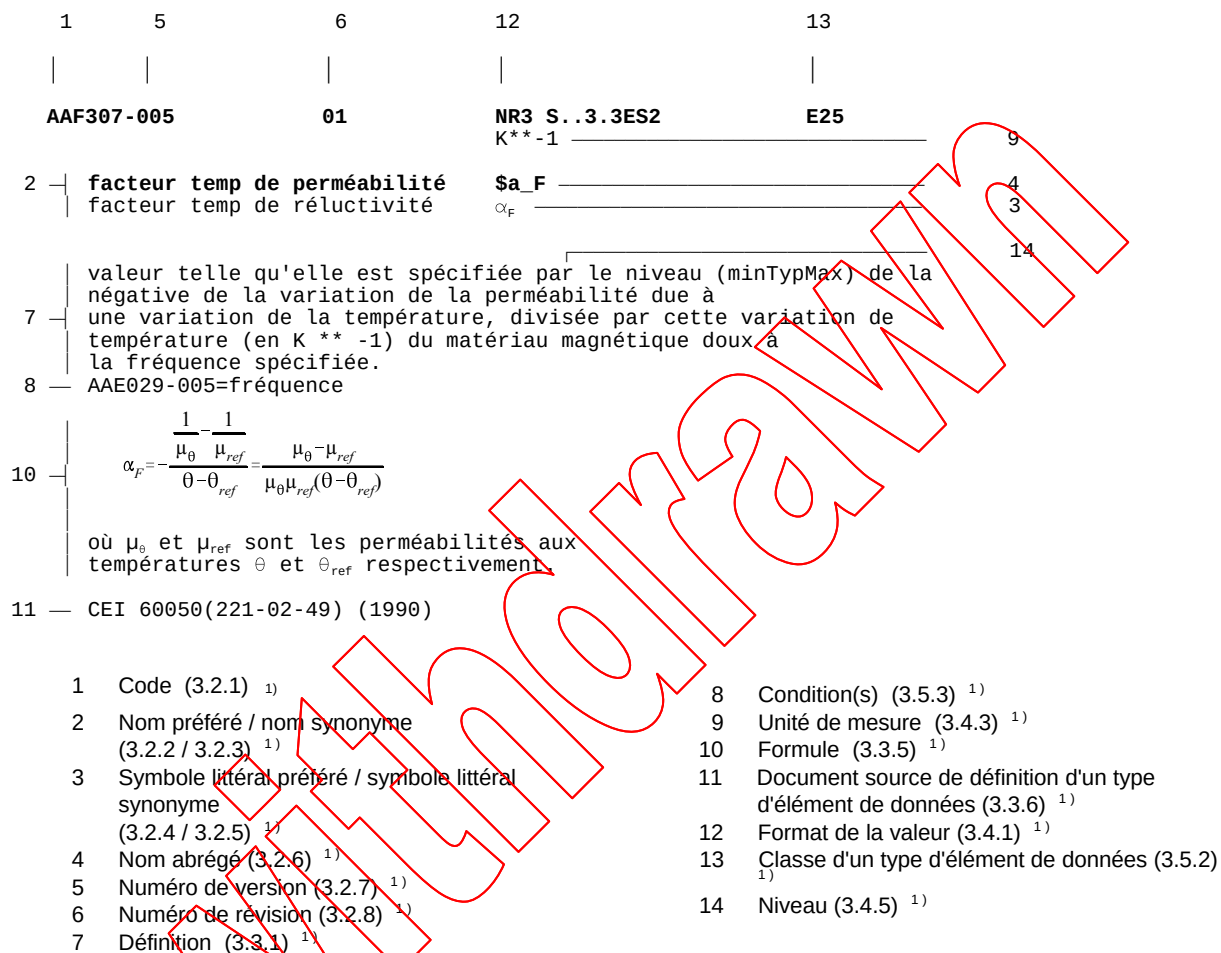


Figure 1 - Attributs de spécification d'un type d'élément de données quantitatif

4.2 Définitions d'un type d'élément de données

A l'annexe A, les définitions des types d'éléments de données des matériaux et des composants électriques y compris les composants électroniques sont indiquées. Les définitions sont présentées dans l'ordre alphanumérique de l'identificateur de type d'élément de données.

¹⁾ Ces paragraphes font référence aux paragraphes de la CEI 61360-1. Il est permis que d'autres attributs tels que ceux spécifiés dans la CEI 61360-1 soient applicables pour d'autres définitions.

4 Data element types

4.1 Data element type specification attributes

The various attributes of the data element types are explained with the aid of figure 1. For a detailed description of the various attributes of the data element type definitions, see IEC 61360-1.

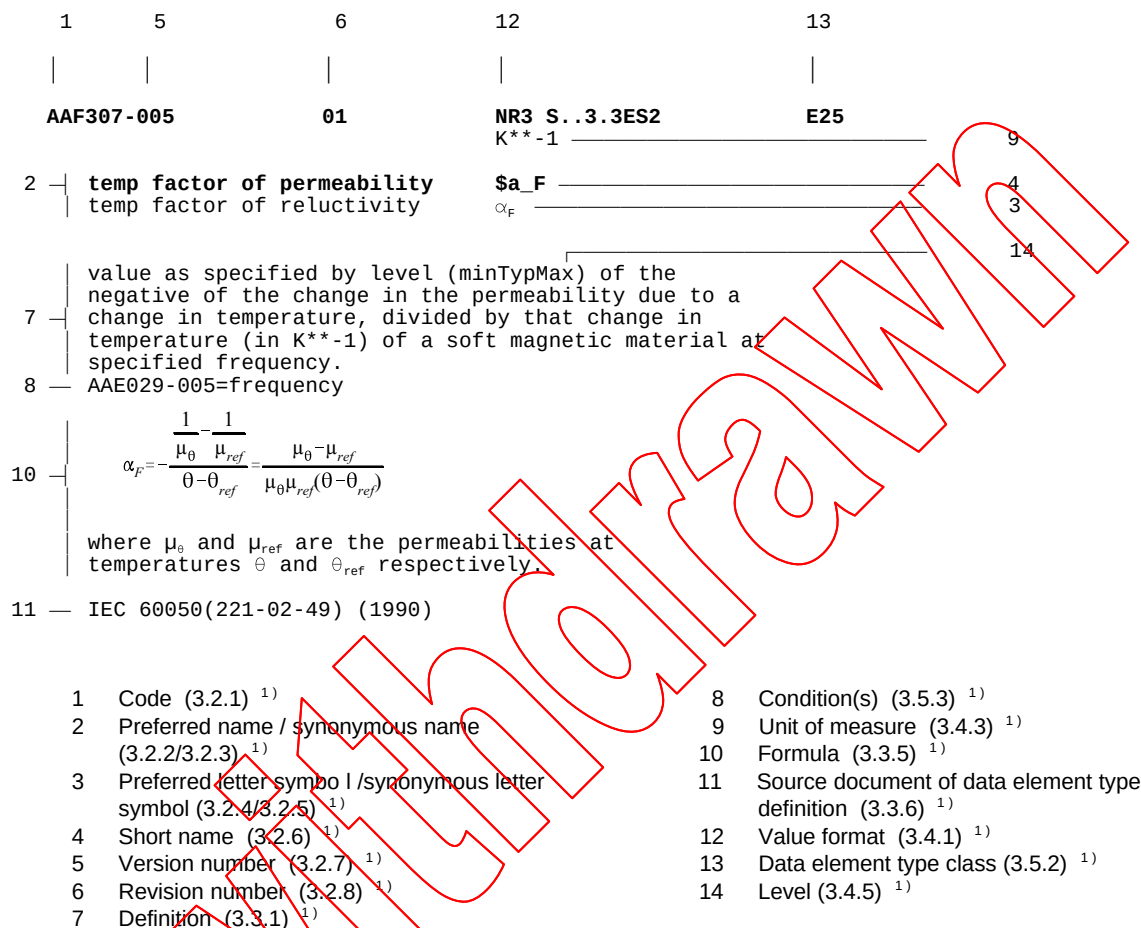


Figure 1 - Quantitative data element type specification attributes

4.2 Data element type definitions

In annex A the definitions of the data element types of materials and electric components, including electronic components, are given.

The definitions are presented in an alphanumerical sequence of the data element type identifier.

¹⁾ These subclauses refer to the subclauses in IEC 61360-1.
Other attributes as specified in IEC 61360-1 may be applicable for other definitions.

4.2.1 Index des symboles littéraux et/ou abréviations

A l'annexe B, on donne un index qui présente les définitions des types d'éléments de données triées par symbole littéral et/ou abréviation comme clé primaire.

Le symbole littéral/l'abréviation sont classés selon :

parenthèse <<(>> caractère <<\$>>, a commercial <<@>>, caractère absolu <<|>> et ordre alphabétique.

Les lettres grecques sont triées selon la <<transcription latine>> des caractères grecs.

La présentation de cet index tel qu'il est utilisé dans la présente norme est donnée à la figure 2.

Abréviation / symbole littéral	Identificateur
Caractéristique d'entraînement	AAF014-005
dV _{com} /dt	AAE741-005
dV _{com} /dt	AAE741-005
dV _D /dt	AAE740-005
dV _D /dt	AAE741-005
dV _D /dt	AAE740-005
E	AAE180-005
E série	AAE030-005
E _{abs}	AAE430-005

Figure 2 - Index des symboles littéraux et/ou des abréviations

4.2.2 Index des mots clés des noms préférés et des noms synonymes

A l'annexe C, un index est présenté dans lequel les mots clés significatifs des noms préférés et des noms synonymes des définitions des types d'éléments de données sont pris comme clés primaires.

Les mots clés sont triés selon : parenthèse <<(>> et ensuite par ordre alphanumérique.

La présentation de cet index telle qu'il est utilisé dans cette norme est donnée à la figure 3.

Mot clé	Nom préféré / noms synonymes	Identificateur
(2-tau)	niveau de signal parasite (2-tau)	AAE888-005
(3-tau)	niveau de signal parasite (3-tau)	AAE879-005
(air)	longueur d'entrefer	AAE778-005
(BH) _{max}	champ à (BH) _{max}	AAF289-005
	densité de flux à (BH) _{max}	AAF293-005
(cap)	application de circuit (cap)	AAE034-005
	coefficient de température (cap)	AAE067-005
(capacitor)	(condensateur) diélectrique	AAE004-006
(ceramic)	classe diélectrique (cap céramique)	AAE038-005
(IEC)	loi de résistance (CEI)	AAE141-005
	tension à classe de courant (CEI)	AAE319-005

Figure 3 - Index des mots clés des noms préférés et des noms synonymes

4.2.1 Index on letter symbol and/or short name

In annex B an index is given presenting the data element type definitions sorted with the letter symbol and/or short name as primary key. The letter symbol/short name are sorted according to: bracket <<(>>, dollar sign <<\$>>, commercial add <<@>>, absolute sign <<|>> and alphabetic. Greek letters are sorted according to the <<Latin writing>> of the Greek characters. The layout of this index as used in this standard is given in figure 2.

Short name / letter symbol	Identifier
drive feature	AAF014-005
dV _{com} /dt	AAE741-005
dV _{com} /dt	AAE741-005
dV _D /dt	AAE740-005
dV _D /dt	AAE741-005
dV _D /dt	AAE740-005
E	AAE180-005
E series	AAE030-005
E _{abs}	AAE430-005

Figure 2 - Index on letter symbol and/or short name

4.2.2 Index on keywords from the preferred names and synonymous names

In annex C an index is presented in which the significant keywords from the preferred names and synonymous names of the data element type definitions are taken as primary keys. The keywords are sorted according to: bracket <<(>> and further alpha-numeric. The layout of this index as used in this standard is given in figure 3.

Keyword	Preferred name / synonymous names	Identifier
(2-tau)	spurious signal level (2-tau)	AAE888-005
(3-tau)	spurious signal level (3-tau)	AAE879-005
(air)	(air) gap length	AAE778-005
(BH) _{max}	field strength at (BH) _{max}	AAF289-005
	flux density at (BH) _{max}	AAF293-005
(cap)	circuit application (cap)	AAE034-005
	temperature coefficient (cap)	AAE067-005
(capacitor)	(capacitor) dielectric	AAE004-006
(ceramic)	dielectric class (ceramic cap)	AAE038-005
(IEC)	resistance law (IEC)	AAE141-005
	voltage at class current (IEC)	AAE319-005

Figure 3 - Index on keywords from the preferred names and synonymous names

5 Classes de composants

5.1 Principes de classification des composants

Pour la classification des composants, le principe consistant à diviser le jeu complet de composants en parties a été appliqué de façon répétée créant ainsi un arbre hiérarchique de plusieurs niveaux de classes.

Le but de ce plan de classification des composants est de disposer les types d'éléments de données d'une façon structurée sans ambiguïté.

Une description détaillée des principes de classification est donnée dans la CEI 61360-1.

5.2 Attributs de classes de composants

Les différents attributs des classes de composants sont expliqués à l'aide de la figure 4. La disposition est présentée telle qu'elle est utilisée dans la présente norme.

Pour une description détaillée des différents attributs des définitions des classes de composants, voir la CEI 61360-1.

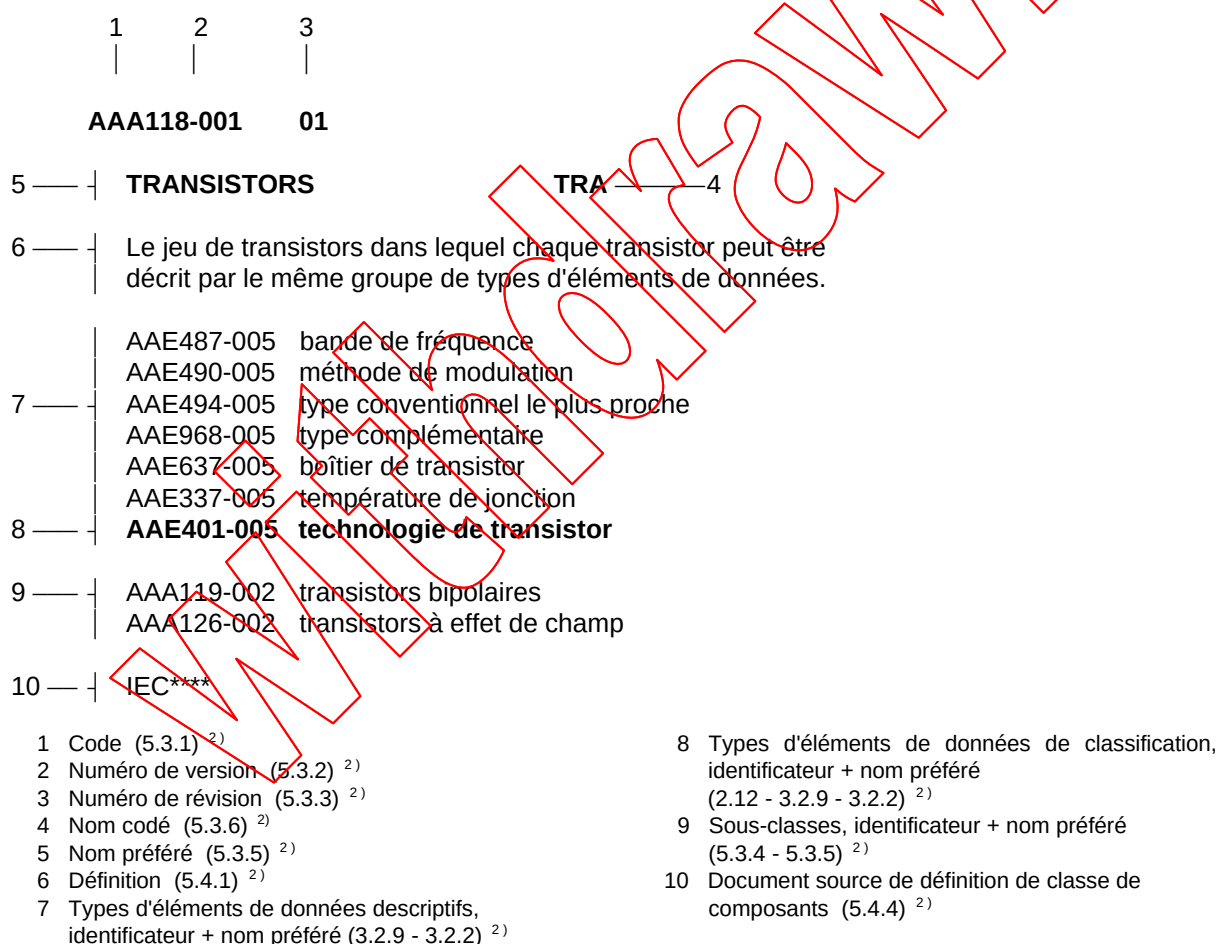


Figure 4 - Attributs de classes de composants

²⁾ Ces paragraphes font référence aux paragraphes de la CEI 61360-1. Il est permis que d'autres attributs tels que ceux spécifiés dans la CEI 61360-1 soient applicables pour d'autres définitions.

5 Component classes

5.1 Component classification principles

For the classification of components 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 is given in IEC 61360-1.

5.2 Component class attributes

The various attributes of the component classes are explained with the aid of figure 4. The layout is shown as used in this standard.

For a detailed description of the various attributes of the component class definitions see IEC 61360-1.

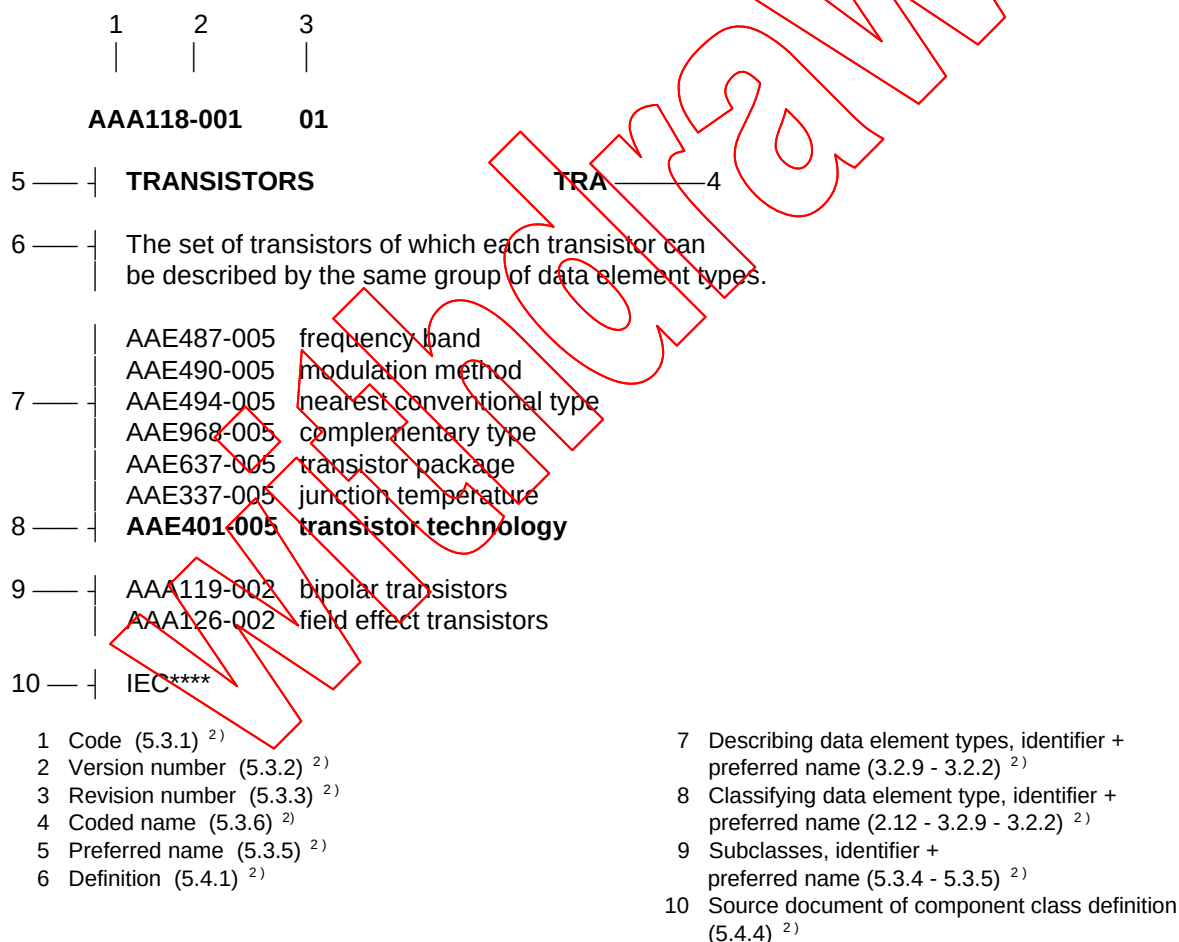


Figure 4 - Component class specification attributes

²⁾ These subclauses refer to the subclauses in IEC 61360-1.
Other attributes as specified in IEC 61360-1 may be applicable for other definitions.

5.3 Tableaux de classification de composants

Les tableaux de classification de matériaux et de composants électriques sont présentés dans l'annexe D.

Une fois de plus, il est stipulé que le seul but de ces tableaux de classification (plans) est de disposer les types d'éléments de données d'une façon structurée non ambiguë de manière à ce qu'ils puissent être gérés.

5.4 Définitions de classes de composants

Les définitions des classes de composants sont présentées dans l'annexe E de la présente norme.

5.4.1 Index des noms préférés

A l'annexe F, un index est présenté dans lequel les noms préférés des classes de composants sont pris comme clés primaires.

Les mots clés sont présentés dans l'ordre alphanumérique.

La disposition de cet index tel qu'il est utilisé dans cette norme est donnée à la figure 5.

Nom préféré	Identificateur de classe de composant
TRANSISTORS BIPOLAIRES	AAA119-002
DIODES À QUATRE COUCHES	AAA045-001
REDRESSEUR EN PONT	AAA043-001
CÂBLES	AAA035-001
ANTENNES CAPACITIVES	AAA014-002
CONDENSATEURS	AAA020-001
CIRCUIT À COUPLAGE DE CHARGE CI	AAA066-001
BOBINES D'ARRÊT	AAA226-001
BOBINES	AAA227-001

Figure 5 - Index des noms préférés des classes de composants

6 Termes

Dans le présent article, la définition de chaque terme associé à la signification de valeur du type d'élément de donnée de classification utilisée pour expliciter le plan de classification et les termes utilisés dans les définitions de types d'éléments de données qui pourraient éventuellement être mal compris sont donnés.

Une description détaillée du modèle d'information d'un terme, les différents attributs et les relations entre les termes et les éléments de données et les classes de composants sont définis dans la CEI 61360-1.

6.1 Attributs de termes

Les différents attributs des termes sont explicités à l'aide de la figure 6 qui décrit la disposition telle qu'elle est utilisée dans cette norme.

Pour une description plus détaillée des différents attributs des définitions de termes, voir la CEI 61360-1.

5.3 Component classification tables

The classification tables of materials and electric components are presented in annex D.

Once more it is stated that the only goal of these classification tables (schemes) is to arrange the data element types in an unambiguously structured way in order to make them manageable.

5.4 Component class definitions

The component class definitions are presented in annex E of this standard.

5.4.1 Index on preferred names

In annex F an index is presented in which the preferred names of the component classes are taken as primary keys.

The keywords are presented in an alpha-numeric order.

The layout of this index as used in this standard is given in figure 5.

Preferred name	Identifier of component class
BIPOLAR TRANSISTORS	AAA119-002
BREAKOVER DIODES	AAA045-001
BRIDGE RECTIFIERS	AAA043-001
CABLES	AAA035-001
CAPACITIVE ANTENNAS	AAA014-002
CAPACITORS	AAA020-001
CHARGE COUPLED DEVICE IC's	AAA066-001
CHOKES	AAA226-001
COILS	AAA227-001

Figure 5 - Index on preferred names of component classes

6 Terms

In this clause, the definition of each term associated with the value meaning of classifying data element types used to clarify the classification scheme and the terms used in the data element type definitions which could possibly be misunderstood are given.

A detailed description of the information model of a term, the various attributes and the relationships between terms and data element types and component classes are defined in IEC 61360-1.

6.1 Term attributes

The various attributes of the terms are explained with the aid of figure 6, which describes the layout as used in this standard.

For a more detailed description of the various attributes of the term definitions see IEC 61360-1.

- 1 — **thermistor**
(**thermistance**)
temperature dependent resistor
- 2 — TDR
- 3 — Résistance (à semi-conducteur) thermiquement sensible dont la fonction primaire est de montrer une variation dans la résistance électrique avec une variation dans la température
- 4 — CEI/TC 40 (Sec) 2250 (516.06.40) (1986)

- 1 Nom préféré / nom synonyme (6.2.1 / 6.2.2) ³⁾
- 2 Nom abrégé (6.2.3) ³⁾
- 3 Définition (6.3.1) ³⁾
- 4 Document source de définition de terme (6.3.6) ³⁾

Figure 6 - Attributs de termes

6.2 Définitions de termes

Les définitions de termes sont présentées dans l'annexe G de la présente norme. Le paragraphe 6.1 présente le format qui est utilisé dans la présente présentation.

6.2.1 Index des mots clés

Un index des mots clés est présenté dans l'annexe H pour lequel le format de présentation est donné ci-dessous.

Mot clé	Nom préféré / nom synonyme
AC	AC amplificateur à liaison AC
accumulator	accumulateur
acoustical	acoustique
AD	AD
address	adresse adresse de base adresse directe adresse intermédiaire adresse indexée adresse indirecte adresse relative
aerial	antenne
air	condensateur à air entrefer

Figure 7 - Exemple d'index de mots clés de termes

³⁾ Ces paragraphes font référence aux paragraphes de la CEI 61360-1.
Il est permis que d'autres attributs tels que ceux spécifiés dans la CEI 61360-1 soient applicables pour d'autres définitions.

- 1 — **thermistor**
temperature dependent resistor
- 2 — TDR
- 3 — A thermally sensitive (semiconductor) resistor whose primary function is to exhibit a change in electrical resistance with a change in its temperature
- 4 — IEC/TC 40 (Sec) 2250 (516.06.40) (1986)

- 1 Preferred name / synonymous name
(6.2.1 / 6.2.2) ³⁾

2 Abbreviated name (6.2.3) ³⁾
- 3 Definition (6.3.1) ³⁾

4 Source document of term definition
(6.3.6) ³⁾

Figure 6 - Term specification attributes

6.2 Term definitions

The term definitions are presented in annex G of this standard. Subclause 6.1 presents the format that is used in this presentation.

6.2.1 Index on keywords

An index on keywords is presented in annex H for which the presentation format is given below.

Keyword	Preferred name / synonymous name
AC	AC AC coupled amplifier
accumulator	accumulator
acoustical	acoustical
AD	AD
address	address base address direct address immediate address indexed address indirect address relative address
aerial	aerial
air	air capacitor air gap

Figure 7 - Example index on keywords in terms

³⁾ These subclauses refer to the relevant subclauses in IEC 61360-1.
Other attributes as specified in IEC 61360-1 may be applicable for other definitions.

6.2.2 Index d'abréviations

Un index des abréviations est présenté dans l'annexe J pour lequel la présentation est donnée ci-dessous.

La première colonne présente l'abréviation (= code de valeur de la valeur de type d'élément de données de classification), la seconde colonne le terme (= signification de valeur de la valeur du type d'élément de donnée de classification).

Abréviation	Signification de la valeur
AC	AC (AC)
ACA	AC coupled amplifier (amplificateur à liaison AC)
ACO	acoustical (acoustique)
AD	AD (AD)
AIR	air capacitor (condensateur à air)
AMP	amplifier (amplificateur)
ANA	analogue (analogique)
ANT	antenna (antenne)
AVA	avalanche diode (diode à avalanche)
BAR	bare conductor (conducteur nu)

Figure 8 - Exemple d'index d'abréviation

6.2.2 Index on abbreviations

An index on abbreviations is presented in annex J for which the presentation is given below.

The first column presents the abbreviation (= value code of the value of a classifying data element type), the second column the term (= value meaning of the value of a classifying data element type).

Abbreviation	Value meaning
AC	AC
ACA	AC coupled amplifier
ACO	acoustical
AD	AD
AIR	air capacitor
AMP	amplifier
ANA	analogue
ANT	antenna
AVA	avalanche diode
BAR	bare conductor

Figure 8 - Example index on abbreviations

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ANNEX A (normative)

Data element type definitions

AAE001-005	01	X..3	A52	AAE005-006	01	X..3	A51
main class of component		main class		transducer principle		trans principle	
Code of the main functional class to which a component belongs.				drive unit type			
EE = EE (electric-electronic)				Code of the transducer principle of a loudspeaker.			
EM = electromechanical				IEC/TC 84(Sec)38(13.1.1) (1986)			
ME = mechanical				MVC = moving conductor loudspeaker			
MP = magnetic part				MGD = magnetodynamic loudspeaker			
				ION = ionic loudspeaker			
				ELM = electromagnetic loudspeaker			
				PNM = pneumatic loudspeaker			
				PXE = piezoelectric loudspeaker			
				ELS = electrostatic loudspeaker			
				MGS = magnetostriction loudspeaker			
AAE002-005	01	X..3	A52	AAE006-006	01	M..8	A55
category EE component		category EE		mounting features		mtg feature	
Code of the category to which an electric-electronic component belongs.				Code of the mounting features which are designed to fasten a component to its counterpart.			
AMP = amplifier				INS = inserted			
ANT = antenna (aerial)				SMD = surface mounted			
BAT = battery				TAP = tapped hole			
CAP = capacitor				STD = stud			
CND = conductor				HOL = through hole			
DEL = delay line				BRC = with bracket			
DID = diode device				C20 = width 20 mm			
FIL = filter				C30 = width is 30 mm			
IC = IC				C40 = width is 40 mm			
IND = inductor				C50 = width is 50 mm			
LAM = lamp				35x7.5 = width is 35 mm, height is 7.5 mm			
LCD = liquid crystal display				35x15 = width is 35 mm, height is 15 mm			
OPT = optoelectronic device				75x25 = width is 75 mm, height is 25 mm			
OSC = oscillator							
PE = piezoelectric device							
RES = resistor							
SEN = sensor							
TFM = transformer							
TRA = transistor							
TRG = trigger device							
TUB = tube							
TUN = tuner							
AAE003-005	01	X..3	A56	AAE007-005	01	M..3	A58
adjustability type		adjustability		terminal shape		terminal shape	
Code of the type of mechanical adjustability of a capacitor, resistor, or transformer.				Code of the shape of the terminals of an electric/electronic or electromechanical component.			
FIX = fixed				BUS = bus			
VAR = variable				CAP = end cap			
				FLT = flat			
				SOL = solid-lead			
				STL = stranded-lead			
				PIN = printed wiring pin			
				SCR = screw			
				STD = stud			
				TAG = solder tag			
AAE004-007	01	X..8	A57	AAE008-005	01	M..8	A58
dielectric material type		dielectric type		terminal placement		terminal place	
(capacitor) dielectric				Code indicating the placement of the terminals of an electric-electronic or electromechanical component.			
Code of the type of dielectric material of a fixed capacitor.				AXIAL = axial			
IEC/TC 40(Sec)2250(516.02.66)				SEND = single ended			
AIR = air capacitor				CIRC = on circle			
CER = ceramic capacitor				DIL = dual in line			
ELC = electrolytic capacitor				SIL = single in line			
FLM = film capacitor				QIL = quadruple in line			
GLS = glass capacitor				GA = grid array			
MIC = mica capacitor				RAD = radial			
PAP = paper capacitor							

AAE009-005	01	M..3	A59	AAE014-005	02	NR1 S..4	H02
performance grade		performance grd		ambient temperature		@T_amb	
IEC standard code identifying the performance grade of a fixed capacitor.				ambient free air temperature		@T_amb @T_a	
IEC 60384-2(1.5.1) (1982)				The ambient free air temperature (in Cel) of a component, as a variable.			
1 = long-life				IEC 60068-1(4.6.2) (1988)			
2 = general purpose				REMARKS:			
REMARKS:				IEC 60068-1(4.4) (1988)			
See IEC 60384-2(4) (1982) and IEC 60384-4(4) (1985) for requirements per test.				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.			
AAE010-005	02	M..17	A59	AAE017-005	01	NR1 S..4	H02
climatic category		climatic cat		reference temperature		T_ref	
IEC standard code indicating the climatic category to which a resistor or capacitor belongs.						T_ref	
IEC 60068-1(8) (1988)				The reference ambient temperature (in Cel) applied to a component.			
REMARKS:				NOTE - T_ref may be used when a number of characteristics are specified at a common ambient temperature.			
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.				AAE018-001	01	NR2 S..3.3	E09
(In the first set the digits denote the temperature below zero in Cel, unless otherwise indicated.)				capacitance lower tolerance %		C_lt(%)	
-First set: Two digits denoting the minimum ambient temperature of operation (cold test).						C_lt (%)	
-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.				The lower tolerance percentage (in %) of the rated capacitance of a fixed capacitor.			
-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.				AAE019-005	01	NR3..3.3ES2	T03
AAE012-005	02	M..35	A61	body length		l_body	
international standard		internat std				l_body	
Reference to an international standard describing a component.				The value as specified by level (miNoMax) of the length (in m) of the body of a component in the x-direction.			
REMARKS:				AAE020-005	01	NR3..3.3ES2	T03
Examples of formats for reference to IEC publications:				body height		h_body	
IEC 60147-1D(V2.1.5.1) (1978) = IEC publication						h_body	
IEC/TC47(CO)797(5.1) (1981) = Publ. of Central office				The value as specified by level (miNoMax) of the height (in m) of the body of a component in the z-direction.			
IEC/TC47(Sec)797(5.1) (1981) = Publ. of Secretariat				AAE021-005	01	NR3..3.3ES2	T03
Examples of formats for reference to ISO publications:				body breadth		b_body	
ISO9999 (1985) = ISO publication						b_body	
ISO/DP999 (1985) = Draft proposal				The value as specified by level (miNoMax) of the breadth (in m) of the body of a component in the y-direction.			
ISO/DIS999 (1985) = Draft Intern. standard				AAE022-005	01	NR3..3.3ES2	T03
AAE013-005	01	NR3 S..3.3ES2	E06	outside diameter		d_out	
voltage (dc)		@U_dc				d_out	
		@U_dc		The value as specified by level (miNoMax) of the outside diameter (in m) of a component with a body of circular cross-section.			
The direct voltage (in V) applied to an electric/electronic or electromechanical component, as a variable.							

AAE023-005	01	NR3..3.3ES2 m	T03	AAE030-005	02	M..8	A52
terminal diameter		d_{term} d _{term}		E series		E series	
The value as specified by level (miNoMax) of the diameter (in m) of the terminals of an electric-electronic or electromechanical component.				IEC code which identifies the preferred value series to which the resistance of a resistor or the capacitance of a capacitor belongs.			
				IEC 60063 (Amd2) (1963)			
				E192 = E192			
				E96 = E96			
				E48 = E48			
				E24 = E24			
				E12 = E12			
				E6 = E6			
				E3 = E3			
AAE024-005	01	NR3..3.3ES2 m	T03	REMARKS:			
terminal pitch		p_{term} p _{term}		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 nominal pitch (in m) of the terminals of an electric-electronic or electromechanical component.				The E96 series is derived from the E192 series by omitting alternate terms.			
IEC 60050 (411) (1973)				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.			
				The E12 series is derived from the E24 series by omitting alternate terms.			
				The E6 series is derived from the E12 series by omitting alternate terms.			
				The E3 series is derived from the E6 series by omitting alternate terms.			
				For tables see IEC 60063 (1977)			
AAE027-005	01	NR3..3.3ES2 m	T03	AAE031-005	02	M..3	A55
mounted height		h_{mnt} h _{mnt}		electrode technology		electrode techn	
mounting height				Code identifying the technology by which the electrodes of a fixed film capacitor are made.			
seated height							
The value as specified by level (miNoMax) of the mounted height of a component (in m), referred to 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 s	T07	AAE033-005	02	M..3	A56
duration		@dt @dt		voltage application		voltage appl	
time interval				Code of the voltage application(s) for which a fixed film capacitor is designed.			
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 Hz	F03	AAE034-005	02	M..3	A56
frequency		@f @f		circuit application (cap)		circuit appl	
The frequency (in Hz) of a sinusoidal input quantity (current, power, voltage, etc.) applied to an electric/electronic or electromechanical component, as a variable.				Code of the circuit application(s) for which a fixed capacitor is designed.			
				CPL = coupling			
				DFL = deflection			
				DEL = delay			
				DCL = decoupling			
				FLT = filtering			
				RIS = radio-interference-suppression			
				SMT = smoothing			
				TC = temperature-compensating			
				TIM = timing			
				TUN = tuning			

AAE035-005	01	M..8	A56	AAE039-005	03	M..8	A57
temperature coefficient code	\$a	α		film dielectric material		film diel mat	
IEC standard code of the temperature coefficient of the capacitance of a fixed class1 ceramic capacitor.				ISO standard code of plastics, used to identify the dielectric material of a fixed film capacitor.			
IEC 60384-8(2.2.5) (1988)				PC = polycarbonate PETP = polyethylene-terephthalate PP = polypropylene PS = polystyrene			
P100 = +100	*10**-6/K						
NP0 = 0							
N33 = -33							
N75 = -75							
N150 = -150							
N220 = -220							
N330 = -330							
N470 = -470							
N750 = -750							
N1000 = -1000							
N1500 = -1500							
N2200 = -2200							
N3300 = -3300							
N4700 = -4700							
N5600 = -5600							
AAE036-005	01	M..3	A56	AAE040-005	02	M..8	A57
safety class		safety class		electrode material type		electrode mat	
IEC standard code of the safety/voltage class of a fixed capacitor for radio interference suppression.				Code of the type of electrode material of an electrolytic capacitor.			
X1 = no shock danger on failure; >1.2 kV pulse				Al = aluminium			
X2 = no shock danger on failure; ≤1.2 kV pulse				SAl = solid aluminium			
U = shock danger on failure; ≤125 V mains voltage				NSAl = non-solid aluminium			
Y = shock danger on failure; 125-250 V mains voltage				Ta = tantalum			
AAE037-005	01	M..3	A56	AAE041-005	02	NR1..4	T07
EIA temp characteristic code		EIA TCh code		shelf life		shelf life	
EIA code of the temperature characteristic of a fixed class2 ceramic capacitor.				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.			
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 sub-class 2B4 Y5V corresponds to IEC sub-class 2F4				AAE014-005 = ambient temperature IEC 60384-1(4.25.1) (1982) REMARKS: This is a modification of the IEC Dry heat test, with extended duration.			
AAE042-005	02			leakage current short term		NR3..3.3ES2	E01
				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(4.9) (1984). AAE028-005 = duration AAE014-005 = ambient temperature IEC/TC 40(Sec)2250(516.02.62) (1986)			
				REMARKS: For leakage current during continuous operation, see AAE043-005.			
AAE043-005	02			leakage current continuous		NR3..3.3ES2	E01
				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 IEC/TC 40(Sec)2250(516.02.62) (1986)			
				REMARKS: For leakage current after a given duration: see AAE042-005.			
AAE038-005	02	X..3	A57				
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							

AAE044-005	01	NR3..3.3ES2	E06	AAE050-005	01	NR3..3.3ES2	F03
rated voltage (dc)		$\frac{U_{Rdc}}{U_{Rdc}}$		resonance frequency		$\frac{f_{rsn}}{f_{rsn}}$	
The maximum direct voltage (in V) which may be applied continuously to a capacitor at any operating ambient temperature below the rated temperature.				lowest resonance frequency			
IEC/TC 40(Sec)2250(516.02.90) (1986)				fundamental resonance freq			
				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			
				IEC/TC 84(Sec)38(19.2) (1986)			
AAE045-005	01	NR3..3.3ES2	E06	AAE051-005	01	NR3..3.3ES2	T03
rated voltage (ac)		$\frac{U_{Rac}}{U_{Rac}}$		centre pole diameter		$\frac{d_{pole}}{d_{pole}}$	
ac voltage				core diameter			
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.				The rounded nominal diameter (in m) of the centre pole of a moving conductor loudspeaker.			
NOTE - IEC has changed its definition from rms into peak value in IEC/TC40(Sec)2250(02.90) (1986).							
IEC/TC 40(Sec)2250(516.02.90) (1986)				AAE053-005	01	M..8	A57
REMARKS:				magnet material		magnet material	
For ac capacitors: rated voltage (ac).				magnet			
For dc capacitors: max. ac voltage.				Code of the material type of the magnet of a moving conductor loudspeaker.			
AAE046-005	01	NR3..3.3ES2	E09	CEP = ceramic			
capacitance		$\frac{C}{C}$		RES = rare earth			
The value as specified by level (miNoMax) of the capacitance (in F) of a fixed capacitor at specified frequency and at reference conditions.				STA = steel alloy			
AAE029-005 = frequency				AAE054-005	01	NR3..3.3ES2	T03
AAE995-005 = reference conditions				affle hole length		$\frac{l_{bfl}}{l_{bfl}}$	
IEC/TC 40(Sec)2250(516.02.06) (1986)				Recommended nominal length (in m) of the affle hole of a moving conductor loudspeaker.			
				IEC 60268-14(4) (1980)			
AAE047-001	01	NR2 S..3.3	E09	AAE055-005	01	M..8	A56
capacitance upper tolerance %		$\frac{C_{ut}(\%)}{C_{ut}(\%)}$		frequency application		frequency appl	
The upper tolerance percentage (in %) of the rated capacitance of a fixed capacitor				Code indicating the application frequency range recommended for a moving conductor loudspeaker.			
AAE048-005	03	NR2..3.3	E49	FULLR = full range			
maximum noise power		$\frac{P_n}{P_n}$		SQUAW = squawker (medium range)			
power handling capacity				TWEET = tweeter (high range)			
rated power				WOOF = woofer (low range)			
The maximum noise power (in W) of a moving conductor loudspeaker calculated from the formula: maximum noise voltage squared over the rated impedance.				AAE056-005	01	NR3..3.3ES2	T03
IEC/TC 84(Sec)38(18.4) (1986)				affle hole breadth		$\frac{b_{bfl}}{b_{bfl}}$	
				Recommended nominal breadth (in m) of the affle hole of a moving conductor loudspeaker.			
				IEC 60268-14(4) (1980)			
AAE049-005	02	NR1..4	E33				
rated impedance		$\frac{R}{R}$					
The nominal substituted dc resistance (in Ohm) of a moving conductor loudspeaker.							
NOTE - Used when defining the available electric power of the source.							
IEC/TC 84(Sec)38(16.1) (1986)							

AAE060-005	01	X..3	A52	AAE065-005	03	NR3..3.3ES2	E44
category EM component		category EM		tangent of loss angle		tanδ	
Code of the category to which an electromechanical component belongs.				dissipation factor		tan δ	
CON = connector FUS = fuse LSP = loudspeaker MIC = microphone MOT = motor REL = relay SWI = switch				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 IEC/TC 40(Sec)2250(516.02.96) (1986)			
AAE061-005	01	M..3	A58	REMARKS:			
shape of flange		flange shape		(IEC 60418-3(III.9) (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.			
Code of the outer shape of the flange of a moving conductor loudspeaker. IEC 60268-14 (1980)							
ELT = elliptical CRC = circular RCT = rectangular OCT = octagonal SQR = square ELE = elliptical with ears CRE = circular with ears							
AAE063-005	03	NR3..3.3ES2	E33	AAE066-005	01	NR3..3.3ES2	F02
insulation resistance		R_{ins}		time constant (of capacitor)		RC	
The minimum insulation resistance (in Ohm) between terminals of a fixed capacitor, determined according to IEC 60384-1(4.5) (1984) at reference conditions. AAE995-005 = reference conditions IEC/TC 40(Sec)2250(516.02.87) (1986)		Ohm		RC product		RC	
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 (U _R) is prescribed in IEC 60384-1(Ann2) (4.5.2) (1987). 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 AAE066-005				The minimum product (in s) of the insulation resistance between terminals and the nominal capacitance of a fixed capacitor. IEC/TC 40(Sec)2250(516.02.99) (1986)			
				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 class1 > 10 nF ceramic class2 > 25 nF radio interference suppr. > 0.33 uF For lower values use R _{ins} (AAE063-005)			
AAE064-005	02	NR3..3.3ES2	E44	AAE067-005	01	NR3 S..3.3ES2	H03
equivalent series resistance		ESR		temperature coefficient (cap)		TC	
The maximum equivalent series resistance (in Ohm) 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 IEC/TC 40(Sec)2250(516.02.86) (1986)		Ohm		TC		K** -1	
				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(2.2.30.2) (1982)			
				REMARKS: The temperature coefficient of variable capacitors is measured at rotor settings and temperatures as given in IEC 60418-1(III.13) (1974).			
AAE068-005	01	NR3..3.3ES2	E09	AAE068-005	01	NR3..3.3ES2	E09
				maximum capacitance		C_{max}	
						F	
				The value as specified by level (miNoMax) of the maximum capacitance (in F) obtainable by moving the actuating device of a variable capacitor. IEC/TC 40(Sec)2250(516.03.18) (1986)			

AAE069-005	01	NR3..3.3ES2	E09	AAE074-005	03	M..8	A56
		F					
minimum capacitance		C_min C_min		IC application field		IC appl field	
The value as specified by level (miNoMax) of the minimum capacitance (in F) obtainable by moving the actuating device of a variable capacitor.				Code identifying the equipment in which an application oriented IC is used.			
IEC/TC 40(Sec)2250(516.03.20) (1986)				AO = application field AUD = audio ARI = traffic warning system CAR = car radio CD = compact disc HAID = hearing aid PASY = paging system RR = radio receiver RC = radio recorder REC = recorder REM = remote control SPS = speech synthesizer AUT = automotive CLWTCH = clocks and watches TCOM = telecommunications TEL = telephony DIAL = dialler MOB = mobile telephony MTR = multi-tone ringer SPS = speech synthesizer DCOM = data communications VID = video CREC = camera recorder CAM = camera DIS = display GAM = games VCR = recorder REM = remote control TV = television receiver E-W = east/west correction SYNC = synchronization HOR = horizontal VERT = vertical V-DEFL = vertical deflection TXT = teletext GP = general purpose			
AAE070-005	01	M..3	A56				
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				
		%					
capacitance tolerance		C_tol C_tol					
The nominal tolerance percentage on capacitance (in %) identifying a capacitor class.							
REMARKS: Used only in cases of equal positive and negative tolerance values.							
AAE072-005	01	NR3..3.3ES2	T03	AAE076-005	01	M..3	A57
		m					
terminal length		l_term l_term		dielectric sub-class2		diel sub class2	
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.				IEC standard code of the sub-class of a fixed class2 ceramic capacitor, as determined by the temperature characteristic of capacitance.			
				IEC 60384-9(1.5.2) (1988)			
AAE073-005	02	NR1..4	T07				
		F					
endurance		endurance endurance		REMARKS:			
Nominal duration of the endurance test (in h) according to IEC 60384-4(4.13) (1985) at the rated voltage (dc) and at specified ambient temperature, which a fixed electrolytic capacitor shall withstand. AAE014-005 = ambient temperature				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 degree 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 degrees C 2 = -55/+ 85 degrees C 3 = -40/+ 85 degrees C 4 = -25/+ 85 degrees C 6 = +10/+ 85 degrees C			

AAE077-005	01	X..3	A56	AAE092-005	01	NR2 S..3.3	E06
signal type		signal type		HIGH-state output voltage		V_{OH}	
Code identifying a function on an IC according to the type of signal being treated.				HIGH-level output voltage		V_{OH}	
IEC/TC 47(CO)1262(702.04) (1987)				output voltage HIGH			
ANA = analogue				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).			
DIG = digital				AAE102-005 = supply voltage			
AD = AD (analogue/digital)				AAE226-005 = output current			
PER = periodic/dc				AAE958-005 = temperature T ₁			
				AAE959-005 = temperature T ₂			
AAE084-005	03	M..8	A56	IEC 60748-2(III.5.1) (1985)			
analogue function		analog function		REMARKS:			
Code identifying an analogue signal function of an IC.				It is required that the value of the logic input voltages falls within either the V _{IH} or the V _{IL} range.			
AMP = amplifier							
BDP = band pass							
DCC = dc controlled							
OPAMP = operational							
PREAMP = preamplifier							
DEC = decoder							
ENC = encoder							
MOD = modulator							
DEM = demodulator							
COMP = comparator							
FIL = filter							
RED = noise reduction							
DOLBY = Dolby							
SUP = interference suppression							
TUN = tuner							
FS = frequency synthesizer							
MIX = mixer							
PRESC = prescaler							
AAE085-005	01	X..3	A56	AAE093-005	01	NR2 S..3.3	E06
digital function		dig function		HIGH-state output voltage ref		V_{OHref}	
Code identifying a digital function of an IC.				HIGH-level output voltage		V_{OHref}	
IEC 60748-2(III.5.1) (1985)				output voltage HIGH			
REMARKS:				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).			
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}).				AAE102-005 = supply voltage			
				AAE226-005 = output current			
				AAE958-005 = temperature T ₁			
				AAE959-005 = temperature T ₂			
CSI = CSI (combinatorial sequential interface)							
MUC = microcontroller							
MUP = microprocessor							
PLD = PLD (programmable logic device)							
STO = storage							
AAE086-005	01	NR2 S..3.3	E06	AAE094-005	01	NR2 S..3.3	E06
supply voltage lim		V_{sup}		LOW-state output voltage ref		V_{OLref}	
dc supply voltage		V_{sup}		LOW-level output voltage		V_{OLref}	
The value as specified by level (minMax) of the limiting direct supply voltage (in V) applied to an IC.				output voltage LOW			
REMARKS:				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).			
Commonly known supply voltage symbols:				AAE102-005 = supply voltage			
V _{CC} for TTL, NMOS and HCMOS circuits				AAE226-005 = output current			
V _{DD} for CMOS circuits				AAE958-005 = temperature T ₁			
V _P for analogue circuits				AAE959-005 = temperature T ₂			
V _{EE} for ECL circuits				IEC 60748-2(III.5.1) (1985)			
				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	AAE112-005	02	M..3	A53
LOW-state output voltage		V_{OL}		taping		taping	
LOW-level output voltage		V _{OL}		Code of taping for automatic handling of products.			
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				AX = axial (tape for axial leads) BL = blister (tape for SMD) CB = cardboard (tape for SMD) RD = unidirectional (tape for radial leads)			
IEC 60748-2(III.5.1) (1985)							
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	AAE113-006	01	NR3..3.3ES2	H03
supply voltage		@V_{sup}		temperature coefficient		\$α	
dc supply voltage		@V _{sup}				α	
The direct supply voltage (in V) applied to an IC, as a variable.				The maximum reversible variation of the resistance (in K*-1) of a fixed linear resistor or a potentiometer.			
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				IEC 60115-1(2.2.20.2) (1982)			
AAE106-005	03	NR1..4	Q56	AAE114-007	01	X..8	A57
number of functions		N_{func}		linearity of a fixed resistor		linearity	
Number of identical functions of a multiple function component.		N _{func}		Code of linearity class to which a fixed resistor belongs.			
REMARKS: Such as identical functions on one IC.				LIN = linear NLN = non-linear			
AAE111-005	01	M..3	A53	AAE115-005	01	NR1..4	H02
packing type		packing type		maximum surface temperature		T_{surf}	
Code of the packing type at specified packing level for products.				maximum body temperature hot spot temperature		T _{surf}	
AMM = ammpack BAG = bag BOX = box BLI = blister CAS = cassette CON = container PAL = pallet RAL = rail RL = reel TRA = tray				The maximum surface temperature (in Cel) of a fixed resistor.			
REMARKS: This data element type must be used in combination with AAF270-005 (packing level).				IEC 60115-1(2.2.12) (1982)			
AAE116-005	02	M..8	A57	AAE118-005	01	NR1..4	E06
resistive material		resistive mat		limiting element voltage (dc)		U_{max}(dc)	
resistance element material				limiting voltage (dc)		U _{max} (dc)	
Code of the resistive material of a fixed linear or a variable resistor.				The maximum limiting dc voltage (in V) that may be applied to a resistor.			
C = carbon MGL = metal glaze MTL = metal WW = wirewound EN = enamelled CEM = cemented CER = ceramic (rectangular) CERMET = ceramic/metal							
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.							

AAE119-005	01	NR3..3.3ES2	E33	AAE130-005	01	NR2..3.3	H07
		Ohm				W/K	
resistance		R R R _{ac}		dissipation factor		\$D Δ	
The value as specified by level (miNoMax) of the resistance (in Ohm) of a fixed linear resistor or variable resistor.				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 60115-1(2.2.7) (1982)				IEC 60539(4.19) (1976)			
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	AAE131-005	01	NR2..3.3	F02
						s	
resistance dependency		res dependency		thermal time constant		\$t τ τ _{th}	
Code of the physical dependency to which a non-linear fixed resistor belongs.				The nominal thermal time constant (in s) of a thermistor.			
LDR = light dependent resistor TDR = thermistor (temperature) VDR = varistor (voltage)				REMARKS: IEC 60539(4.20) (1976) 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 (for measuring conditions, see Sub-clause 12.7).			
AAE123-005	01	NR3..3.3ES2	E33	AAE132-005	01	NR1..4	H01
		Ohm				K	
dark resistance		R _D R _D		therm sensitivity index B25/85		B _{25/85} B _{25/85}	
The minimum value of the dark resistance (in Ohm) of a light dependent resistor.				The value as specified by level (miNoMax) of the mean temperature sensitivity index (in K) of an NTC thermistor between 25 and 85 Cel.			
AAE124-005	01	NR3..3.3ES2	E33	AAE135-005	02	NR3..3.3ES2	H15
		Ohm				J/K	
light resistance		R _L R _L		heat capacity		C C H	
The value as specified by level (minMax) of the value of the light resistance (in Ohm) of a light dependent resistor.				The nominal heat capacity (in J/K) of a PTC resistor or piezoelectric device.			
AAE125-005	01	NR2..3.3	E01	ISO 31-4 (1992)			
		A		AAE136-005	01	NR3..3.3ES2	E01
current (pulse)		I _{pul} @I _{pul}				A	
The peak value of a pulse current (in A) passed through an electric-electronic or electromechanical component, as a variable.				trip current			
AAE126-005	01	X..3	A56			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			
thermistor type		TDR type		AAE137-005	01	NR3..3.3ES2	E01
Code of the sign of the temperature coefficient belonging to a thermistor.						A	
NTC = NTC PTC = PTC				non-trip current		I _{nt} I _{nt}	
AAE127-005	01	NR3..3.3ES2	E33	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			
		Ohm					
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.							

AAE138-005	01	NR1..4	H02	AAE147-005	01	NR3..3.3ES2	T03
switching temperature switch temperature		T_{sw} T_{sw}		spindle length		l_{spin} l_{spin}	
The nominal temperature (in Cel), under zero power conditions, at which the resistance value of a PTC thermistor is twice the R_{min} value.				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.			
AAE139-005	01	X..3	A52	AAE148-005	01	NR3..3.3ES2	T03
number of terminals		number of term		spindle diameter		d_{spin} d_{spin}	
Code of the number of terminals identifying a variable resistor.				The nominal diameter (in m) of the spindle of a rotary potentiometer.			
TT = two-terminal variable resistor POT = potentiometer (3 or more terminals)							
AAE141-005	01	M..8	A52	AAE149-006	02	M..17	A59
resistance law (IEC)		resistance law		safety approval		safety approval	
IEC code of the resistance law of a potentiometer.				The abbreviated name of the office which has approved the safety of an electric-electronic or electromechanical component.			
IEC/TC 40(CO) 506(2.2.37) (1982)				BEAB (BSI) = British Electrical Approvals Board CEBEC = Comité Electrotechnique Belge (Belgium) CSA = Canadian Standards Association DEMKO = Danmarks Elektriske Materielkontrol FIMKO = FIMKO LDT (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 Materielkontrol (Norway) OEVE = Oesterreichischer Elektrotechnischer Verein ROV = Rontgen Verordnung (West Germany) SEMKO AB = Svenska Elektriska Materielkontrollanstalten SEV = Schweizerischer Elektrotechnischer Verein UL = Underwriters' Laboratories Inc. (USA) VDE = Verband Deutscher Elektrotechnischer Verein			
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	AAE150-005	01	NR3..3.3ES2	E06
actuator type		actuator type		voltage (ac)		@ U_{ac} @ U_{ac}	
moving contact actuator type				The rms sinusoidal voltage (in V) applied to an electric-electronic or electromechanical component, as a variable.			
Code of the moving contact actuator type of a potentiometer.							
ROT = rotary SLD = slide							
AAE144-005	01	M..3	A58	AAE151-005	01	M..8	A52
mounting position		mtg position		winding configuration		winding config	
Code of the (intended) mounting position of a potentiometer with printed wiring pins.				Code of the winding configuration of a transformer or inductive antenna.			
HOR = horizontal version VER = vertical version				AUTO = auto SEPRT = separate			
AAE145-005	01	M..3	A57	AAE152-005	01	X..3	A56
spindle material of potmeter		spindle mat		power/signal		power/signal	
spindle material				Code of the application of a transformer or cable.			
Code of the spindle material of a rotary potentiometer.				POW = power SIG = signal			
MTL = metal PLA = plastic							
AAE146-005	01	NR1..4	E06				
ganging tolerance		ganging tol					
ganging tol							
The maximum ganging tolerance (in dB) of a tandem potentiometer.							

AAE155-005	01	NR3..3.3ES2 Ohm	E33	AAE163-005	01	NR1..4 V	E06
insulation resistance		R_{ins} R _{ins}		input voltage supply voltage		U_{in} U _{in}	
The minimum insulation resistance (in Ohm) between the live and non-live parts of a switch, relay, transformer or connector.				The value as specified by level (miNoMax) of the rms sinusoidal input voltage (in V) of a power transformer.			
IEC 60068(2-3) (1969)				REMARKS: IEC 60742(2.11) (1983): For polyphase supply, the line voltage is intended.			
REMARKS: IEC 60742(17.2) (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.				AAE164-005	01	NR1..4 V	E06
AAE156-005	01	NR3..3.3ES2 Hz	F03	no-load output voltage		U_{out(open)} U _{out(open)}	
upper frequency		f_{upr} f _{upr}		The maximum rms no-load output voltage (in V) at nominal input voltage and at nominal frequency.			
The nominal upper frequency (in Hz) of a signal transformer.				IEC 60742(2.19) (1983)			
AAE157-005	01	NR1..4 Hz	F03	output power	02	NR3..3.3ES2 VA	E49
lower frequency		f_{low} f _{low}		The nominal rms power (in VA) of a power transformer.			
The nominal lower frequency (in Hz) of a signal transformer.				IEC 60076-1(3.4.6) (1993)			
AAE158-005	01	NR3..3.3ES2 m	T03	operating frequency	01	NR3..3.3ES2 Hz	F03
clearance to earth spark gap spark distance		clearance clearance		The value as specified by level (miNoMax) of the frequency (in Hz) of a power transformer.			
The minimum clearance to earth (in m) of a power transformer.				IEC 60076-1(3.4.5) (1993)			
IEC 60050(441-17-33) (1984)				AAE167-005	02	M..3	A56
AAE159-005	01	NR3..3.3ES2 m	T03	transformer model		tfm model	
creepage distance leakage path		d_{crpg} d _{crpg}		Code of the model of a variable power transformer.			
The minimum creepage distance (in m) between live and non-live parts of a power transformer or connector.				BNC = bench (protective housing) LBR = laboratory(bench model with handle, cable, fuse) PNL = panel (not protected live parts)			
IEC 60742(2.48) (1983)				AAE168-005	01	NR1..4 A	E01
AAE160-005	01	NR1 S..4 A	E01	maximum output current continuous overload		I_{out} I _{out}	
nominal output current		I_{out} 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.			
The nominal output current (in A) of a power transformer, at nominal input voltage and nominal frequency.				IEC 60186(4.9) (1987)			
IEC 60742(2.14) (1983)				AAE169-005	02	NR1..4 V	E06
REMARKS: For variable power transformers, the nominal output current is valid over the whole range.				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(4.9) (1987)			

AAE170-005	02	NR3..3.3ES2 1	Q59	AAE177-005	03	M..8	A51
brush life		N_{turn} N _{turn}		integrated component		integr comp	
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.				Code indicating a component integrated with a motor or relay.			
				BRAKE = brake EBRAKE = brake electromagnetic PBRAKE = brake permanent magnetic MBRAKE = brake mechanical ENCOD = encoder GEAR = gearbox LGEAR = gearbox linear RGEAR = gearbox rotational PINION = pinion SPARKS = spark suppressor TACHO = tachogenerator			
AAE171-005	02	NR3..3.3ES2 1	Q59				
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 1	Q56	AAE178-005	01	X..3	A52
ganging number number of variable elements		N_{gang} N _{gang}		supply current type		I_{sup} type	
The number of variable elements (capacitors, resistors, power transformers) with a common actuating device.				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)			
AAE173-005	01	NR1..4 deg	T01	AAE179-005	01	X..3	A52
total mechanical rotation angle of mechanical rotation		\$a_{rot} α _{rot}		trajectory of motion		trajectory	
The nominal angle of the total rotation (in deg) of the moving contact actuator of a rotary potentiometer or a variable power transformer.				Code of the trajectory of motion of the armature of a motor.			
IEC/TC 40(CO)506(2.2.49.1) (1982)				LIN = linear ROT = rotational			
AAE174-005	01	M..3	A51	AAE180-005	01	NR3..3.3ES2 V/(r/min)	E06
magnet type magnetization system magnet material		magnet type		electromotive force		E E	
Code of the magnet type of the iron armature of a motor.				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.			
ELM = electromagnet HBD = hybrid NOM = no magnet PMM = permanent magnet				IEC 60050(131-01-38) (1978)			
AAE175-005	01	M..3	A51	AAE182-005	02	NR3..3.3ES2 W	E49
coil connection		coil connection		input power		P_{in} P _{in}	
Code of the coil connection of a motor.				The nominal electric power (in W) supplied to a motor.			
CMP = compound SRS = series SHP = shunt (parallel)				IEC 60050(151-03-04) (1978)			
AAE176-005	01	M..3	A51	AAE183-005	02	M..8	A52
armature material		armature mat		ac motor synchronism		motor syn	
Code of the type of material of the armature of a motor.				Code indicating the synchronism of an ac motor.			
IRN = iron IRL = iron-less				ASYN = asynchronous SYN = synchronous SREL = reluctance			

AAE184-005	01	NR3..3.3ES2 V	E06	AAE192-005	02	NR3..3.3ES2 N.m	K12
rated input voltage (ac) driving voltage		$\underline{U}_{ac}$ $\underline{U}_{ac}$		torque		$\underline{T}$ $\underline{T}$	
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(9.1) (1994)				Torque (in N.m) of a rotational motor, as a variable.			
AAE186-005	01	NR3..3.3ES2 V	E06	AAE193-005	01	NR3..3.3ES2 r/min	F03
rated input voltage (dc)		$\underline{U}_{dc}$ $\underline{U}_{dc}$		speed		$\underline{v}$ $\underline{v}$	
The nominal direct voltage (in V) at the terminals of a dc motor. IEC 60034(1-9.1) (1994)				Speed (in r/min) of a rotational motor, as a variable.			
AAE187-005	01	NR3..3.3ES2 s	F02	AAE194-005	01	NR1..4 r/min	F03
mechanical time constant		$\$t$ t		synchronous speed		$\underline{v}_{syn}$ $\underline{v}_{syn}$	
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. IEC 60050(411-16-05) (1973)				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.			
AAE188-005	02	M..3	A56	AAE195-005	01	NR3..3.3ES2 r/min	F03
direction of rotation		dir rot		rated speed		$\underline{v}_{rat}$ $\underline{v}_{rat}$	
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.				The nominal speed (in r/min) of a rotational ac asynchronous or dc motor at the rated input voltage and rated torque.			
AAE189-005	02	NR3..3.3ES2 kg*m**2	K07	AAE196-005	02	NR3..3.3ES2 N.m	K12
rotor inertia		$\underline{I}$ $\underline{I}$ $\underline{J}$		starting torque		$\underline{T}_{strt}$ $\underline{T}_{strt}$	
The nominal rotor moment of inertia (in kg*m*m) of a rotational motor.				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(411-18-05) (1973)			
AAE190-005	02	NR2..3.3 N	K09	AAE197-005	01	NR3..3.3ES2 A	E01
maximum radial force		$\underline{F}_{rad}$ $\underline{F}_{rad}$		rated input current		$\underline{I}$ $\underline{I}$	
The maximum radial force (in N) on the spindle of a motor.				The nominal direct input current (in A) of a rotational dc motor at rated input voltage and at rated working torque.			
AAE191-005	02	NR3..3.3ES2 N.m	K12	AAE199-005	02	NR3..3.3ES2 N.m	K12
rated torque max working torque max load torque		$\underline{T}_{rat}$ $\underline{T}_{rat}$		starting torque		$\underline{T}_{strt}$ $\underline{T}_{strt}$	
The nominal torque (in N.m) of a rotational motor. IEC 60050(411-18-01) (1973)				The minimum starting torque (in N.m) which a rotational dc motor develops with the rated input voltage (dc) applied. IEC 60050(411-18-05) (1973)			

AAE200-005	02	NR2..3.3 N	K09	AAE207-005	02	NR3..3.3ES2 N.m	K12
maximum axial force		F_{ax} F _{ax}		holding torque		T_{hold} T _{hold}	
The maximum axial force (in N) on the spindle of a rotational motor. NOTE - Axial means in line with the shaft (pull or push).				The maximum steady torque (in N.m) that can be externally applied to the spindle of an excited motor without causing continuous rotation.			
AAE201-005	02	NR2..3.3 N.m	K12	AAE208-005	01	NR1 S..4 deg	T01
pull-out torque breakdown torque maximum work torque		T_{pull-out} T _{pull-out}		step angle		α_{step} α _{step}	
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(411-18-10) (1973)				The nominal angle (in deg) between adjacent step positions of a stepping motor or a mechanical rotary switch.			
AAE202-005	02	NR3..3.3ES2 N.m	K12	AAE209-005	02	NR3..3.3ES2 step/s	F03
pull-in torque max pull-in		T_{pull-in} T _{pull-in}		stepping rate		@step rate @step rate	
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(411-18-08) (1973)				Number of steps/s of a rotational stepping motor, as a variable.			
AAE203-005	01	NR3..3.3ES2 A	E01	AAE210-005	01	NR2 S..3.3 V	E06
current per phase		I_{ph} I _{ph}		input voltage lim		V_{Ilim} V _{Ilim}	
The nominal rms input current (in A) of a linear stepping motor.				The value as specified by level (minMax) of the limiting direct input voltage (in V) applied to an IC.			
AAE204-005	01	NR3..3.3ES2 V	E06	AAE212-005	01	NR3..3.3ES2 Ohm	E33
rated input voltage (pulse)		U_{pul} U _{pul}		load resistance		@R_L @R _L	
The nominal pulse voltage (in V) at the terminals of a stepping motor. IEC 60034(1.9.1) (1994)				Load resistance (in Ohm) at the output of an electric/electronic or electromechanical component, as a variable.			
AAE205-005	01	NR1..4 step/s	F03	AAE214-005	01	NR2..3.3 W	H07
pull-in rate		pull-in rate pull-in rate		power dissipation per out dc power dissipation/output		P/out P/out	
The maximum switching rate (in step/s) at which an unloaded stepping motor can start without losing steps.				The maximum permissible power dissipation per output (in W) of an IC at specified ambient temperature. AAE014-005 = ambient temperature			
AAE206-005	01	NR1..4 step/s	F03	AAE217-005	01	NR3 S..3.3ES2 A	E01
pull-out rate		pull-out rate pull-out rate		input current lim dc input diode current input clamping current		I_{Ilim} I _{Ilim} I _{INlim} I _{IKlim}	
The maximum switching rate (in step/s) which an unloaded stepping motor can follow without losing steps.				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	01	NR3 S..3.3ES2	E01	AAE231-005	02	NR3..3.3ES2	T07
		A				S	
output current lim		I_{Olim}		propagation delay		t_{PD}	
dc output diode current		I _{Olim}		delay time		t _{PD}	
output clamping current		I _{OKlim}					
The maximum limiting dc output current (in A) of a digital function of an IC.				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			
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	AAE233-005	02	NR3..3.3ES2	T07
		A				S	
input leakage current		I_I		HIGH to LOW propagation time		t_{PHL}	
		I _I		HIGH to LOW delay time		t _{PHL}	
		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				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(II.1.4.7) (1985)			
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	AAE235-005	02	NR3..3.3ES2	T07
		V				S	
input voltage		@V_I		output fall time		t_f	
		@V _I		HIGH to LOW transition time		t _f	
				switching time		t _{THL}	
The dc input voltage (in V) of an IC, as a variable.				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). AAE256-005 = load capacitance AAE102-005 = supply voltage AAE958-005 = temperature T ₁ AAE959-005 = temperature T ₂ IEC 60748-2(II.1.4.8) (1985)			
AAE225-005	02	NR3..3.3ES2	T07	REMARKS: The voltage level specified for the beginning of the slope is 10%, that for the end of the slope is 90%.			
		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	AAE237-005	02	NR3..3.3ES2	T07
		A				S	
output current		@I_O		LOW to HIGH propagation time		t_{PLH}	
		@I _O		LOW to HIGH delay time		t _{PLH}	
The dc output current (in A) of an IC, as a variable.				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(II.1.4.7) (1985)			
AAE228-005	01	NR2 S..3.3	E06				
		V					
output voltage		@V_O(dc)					
		@V _O (dc)					
The dc output voltage (in V) of an IC, as a variable.							

AAE238-005	02	NR3..3.3ES2	T07	AAE254-005	02	NR3 S..3.3ES2	E01
		S				A	
output rise time		t_r		LOW-state output current		I_{OL}	
LOW to HIGH transition time		t_r		LOW-level output current		I_{OL}	
switching time		t_{LH}		output sink current			
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). AAE256-005 = load capacitance AAE102-005 = supply voltage AAE958-005 = temperature T_1 AAE959-005 = temperature T_2 IEC 60748-2(II.1.4.8) (1985) REMARKS: The voltage level specified for the beginning of the slope is 10%, that for the end of the slope is 90%.				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(III.5.3.1) (1985) 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}).			
AAE239-005	02	NR3 S..3.3ES2	E01	AAE255-005	02	NR3 S..3.3ES2	E01
		A				A	
HIGH OFF-state output current		I_{OZH}		HIGH-state output current		I_{OH}	
3-state output leakage current		I_{OZH}		HIGH-level output current		I_{OH}	
OFF-state current		I_{OZ}		output source current			
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(III.5.1.4) (1985) 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}).				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(III.5.3.1) (1985) 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}).			
AAE240-005	02	NR3 S..3.3ES2	E01	AAE256-005	01	NR3..3.3ES2	E09
		A				F	
LOW OFF-state output current		I_{OZL}		load capacitance		@C _L	
3-state output leakage current		I_{OZL}				@C _L	
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(III.5.1.4) (1985) 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}).				Load capacitance (in F) at the output of an electric/electronic or electromechanical component, as a variable.			
AAE257-005	01	NR2..3.3	H07	AAE257-005	01	NR2..3.3	H07
		W				W	
power dissipation		P		power dissipation		P	
		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. AAE685-005 = temperature AAE683-005 = temperature type				The maximum power (in W) of an electric-electronic or electromechanical component which may be dissipated continuously at specified temperature of a temperature type. AAE685-005 = temperature AAE683-005 = temperature type			

AAE259-005	01	M..8	A58	AAE262-005	01	M..8	A55
shape/size code BSI	shape/size	encapsulation technology	encapsulation				
BSI code of the shape/size of an electric-electronic or electromechanical component for placement on printed circuits.				Code indicating the encapsulation technology which has been applied in an electric-electronic or electro-mechanical component.			
BS 6943 (1988)				LACQ = lacquered MOULD = moulded POTTED = potted SLEEVE = sleeved SEAL = sealed coat WRAP = wrapped end-filled			
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, metallized 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							
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.				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.] tolerance on temperature] (10** ⁻⁶ /K)] 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 (1979).			
AAE260-005	02	NR1 S..4	H02	AAE267-005	01	NR1..4	H02
case temperature	@T _{case}	rated temperature	T _{rat}				
The case temperature (in Cel) of a component, as a variable.				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.			
IEC 60068-1(4.7) (1988)							

AAE268-001	01	NR3 S..3.3ES2	E09	AAE276-005	02	NR3..3.3ES2	E01
		F				A	
capacitance upper tolerance		C_{ut}		reverse current		I_{R}	
		C_{ut}		cont direct reverse current		I_{R}	
The upper tolerance (in F) of the rated capacitance of a fixed capacitor.				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 AAE685-005 = temperature AAE683-005 = temperature type IEC 60747-2 (II.2.2.6) (1983)			
AAE269-001	01	NR3 S..3.3ES2	E09	AAE277-005	02	NR2..3.3	E06
		F				V	
capacitance lower tolerance		C_{lt}		reverse voltage		V_{R}	
		C_{lt}		stand-off voltage		V_{R}	
The lower tolerance (in F) of the rated capacitance of a fixed capacitor.				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. AAE685-005 = temperature AAE683-005 = temperature type IEC 60747-2 (II.2.1.4) (1983)			
AAE271-005	01	NR1..4	H02	AAE279-005	02	NR2..3.3	E06
		Cel				V	
junction temperature		$@T_j$		forward voltage		V_F	
virtual junction temperature		$@T_j$		on-state voltage		V_F	
The junction temperature (in Cel) of a transistor, diode, trigger device, optoelectronic device or IC as a variable. IEC 60747-1 (IV.5.2.3) (1983)				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 AAE685-005 = temperature AAE683-005 = temperature type IEC 60747-2 (II.2.1.1) (1983)			
AAE272-005	01	NR1..4	H02	AAE281-005	02	NR3..3.3ES2	T07
		Cel				S	
mounting base temperature		$@T_{mb}$		reverse recovery time		t_{rr}	
		$@T_{mb}$				t_{rr}	
The temperature (in Cel) of the mounting base of a transistor, diode, trigger device, optoelectronic device or IC, as a variable. JEDEC 77/B/2.0 (1981)				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. AAE274-005 = forward current AAE335-005 = reverse voltage AAE275-005 = rate change of forward current AAE271-005 = junction temperature IEC 60747-2 (II.2.4.3) (1983)			
AAE273-007	01	X..8	A56	AAE282-005	01	NR3..3.3ES2	E01
						A	
diode application		diode appl		output current EHT supply		$I_{O(EHT)}$	
Code of the type of application of a diode.						$I_{O(EHT)}$	
BOD		= breakover diode		The maximum output current (in A) at the EHT supply output of a voltage multiplier.			
REC		= rectifier diode					
SIG		= signal diode					
STB		= stabilizer diode					
VAR		= variable capacitance diode					
AAE274-005	02	NR3..3.3ES2	E01				
		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 (II.2.2.1) (1983)							
AAE275-005	01	NR3..3.3ES2	E01				
		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.							

AAE283-005	01	NR3...3.3ES2 A	E01	AAE291-005	01	NR1..4 V	E06
output current focus supply		I_{Ofoc} I_{Ofoc}		rms input voltage		$V_I(RMS)$ $V_{I(RMS)}$	
The maximum output current (in A) at the focus supply output of a voltage multiplier.				The maximum rms input voltage (in V) of a bridge rectifier.			
AAE284-005	02	NR2...3.3 A	E01	AAE292-005	01	NR1..4 V	E06
peak inrush current lim		I_{IIMlim} I_{IIMlim}		crest working input voltage		V_{IWM} V_{IWM}	
The maximum limiting peak inrush current (in A) of a bridge rectifier.				The maximum peak input voltage (in V) of a bridge rectifier. NOTE - Excluding all repetitive and non-repetitive transient voltages.			
AAE285-005	02	NR2...3.3 A	E01	AAE293-005	02	NR3...3.3ES2 A	E01
non-rep peak input current lim		I_{ISMLim} I_{ISMLim}		rep peak forward current		I_{FRM} I_{FRM}	
The maximum limiting non-repetitive peak input current (in A) flowing through a bridge rectifier.				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(II.2.2.3) (1983)			
AAE286-005	01	NR2...3.3 A	E01	AAE294-005	01	NR1..4 A	E01
average output current		$I_O(AV)$ $I_{O(AV)}$		non-rep peak forward current		I_{FSM} I_{FSM}	
The maximum average output current (in A) of a bridge rectifier at specified maximum mounting base temperature.				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(II.2.2.5) (1983)			
AAE287-005	01	NR2...3.3 A	E01	REMARKS: Half-sinewave duration is 10 ms.			
repetitive peak output current		I_{ORM} I_{ORM}		AAE296-005	02	NR1..4 A	E01
The maximum repetitive peak output current (in A) of a bridge rectifier.				working peak forward current		I_{FWM} I_{FWM}	
AAE288-005	02	NR3...3.3ES2 V	E06	The maximum working peak forward current (in A) of an efficiency diode.			
input voltage peak-to-peak		$V_{in(p-p)}$ $V_{in(p-p)}$		AAE297-005	01	NR3...3.3ES2 A	E01
The maximum peak-to-peak input voltage (in V) of a voltage multiplier.				rep peak reverse current		I_{RRM} I_{RRM}	
AAE289-005	02	NR3...3.3ES2 V	E06	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. AAE274-005 = forward current AAE335-005 = reverse voltage AAE275-005 = rate change of forward current AAE271-005 = junction temperature			
output voltage EHT supply		$V_O(EHT)$ $V_{O(EHT)}$		rep peak recovery current			
The maximum output voltage (in V) at the EHT output of a voltage multiplier.							
AAE290-005	01	NR1..4 V	E06				
rep peak input voltage		V_{IRM} V_{IRM}					
The maximum repetitive peak input voltage (in V) of a bridge rectifier or voltage multiplier.							

AAE298-005	01	NR2..3.3 A	E01	AAE303-006	01	NR2..3.3 W	H07
non-rep varistor peak current non-repetitive surge current non-rep transient current		I_{nrp} I _{nrp}		non-rep peak reverse power dis.		P_{RSM} P _{RSM}	
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				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. AAE271-005 = junction temperature AAE028-005 = duration			
AAE299-005	01	NR1..4 V	E06	AAE304-005	02	NR3..3.3ES2 J	H20
crest working reverse voltage working reverse voltage		V_{RWM} V _{RWM}		non-rep peak rev aval energy		E_{RSM} E _{RSM}	
The maximum peak reverse voltage (in V), across a rectifier diode. NOTE - Excluding all repetitive and non-repetitive transient voltages. IEC 60747-2(II.2.1.5) (1983)				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			
AAE300-005	01	NR1..4 V	E06				
rep peak reverse voltage		V_{RRM} V _{RRM}		AAE305-005	01	NR2 S..3.3 J	H06
The maximum repetitive peak reverse voltage (in V) across a diode or reverse blocking thyristor. IEC 60747-2(II.2.1.6) (1983)				Joule-integral I squared t for fusing		(I**2)*t I²t	
				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 a specific energy, i.e. the energy released as heat in 1 Ohm of circuit resistance. AAE028-005 = duration IEC 60291(1.5) (1969)			
AAE301-005	02	NR1..4 V	E06				
non-rep peak reverse volt		V_{RSM} V _{RSM}					
The maximum non-repetitive peak reverse voltage (in V) of a rectifier diode or signal diode. IEC 60747-2(II.2.1.7) (1983)				REMARKS: The value is given for the selection of fuses.			
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	01	NR2..3.3 W	H07	AAE306-005	03	NR3..3.3ES2 S	T07
rep peak reverse power dis		P_{RRM} P _{RRM}		total reverse recovery time		t_{tot} t _{tot}	
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} . AAE271-005 = junction temperature AAE028-005 = duration AAE029-005 = frequency				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 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. AAE274-005 = forward current AAE275-005 = rate change of forward current AAE271-005 = junction temperature AAE994-005 = reverse current			

AAE310-005	02	NR2..3.3 Ohm	E44	AAE317-005	01	NR3..3.3ES2 A	E01
diode forward resistance diode series resistance	r_D r_D			peak working current		I_{ZM} I_{ZM}	
The value as specified by level (minTypMax) of the series resistance (in Ohm) of a signal diode or variable capacitance diode at specified frequency and forward current. AAE029-005 = frequency AAE274-005 = forward current				The maximum peak working current (in A) of a stabilizer diode.			
AAE311-005	02	NR2..3.3 Ohm	E44	AAE318-005	02	NR2..3.3 A	E01
diode reverse resistance diode series resistance	r_s r_s			non-rep peak reverse current		I_{RSM} I_{RSM}	
The value as specified by the level (minTypMax) of the series resistance (in Ohm) 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				The maximum non-repetitive peak reverse current (in A) of a stabilizer 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			
AAE312-005	01	X..3	A56	AAE319-005	01	NR1..4 V	E06
diode function Code of the function of a stabilizer diode.	diode function			maximum clamping voltage max peak voltage at I_{class} voltage at class current (IEC)		U_{clam} U_{clam}	
CUR = current regulator diode REF = voltage reference diode REG = voltage regulator diode STA = stabistor SUP = transient suppressor diode				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)			
AAE313-005	01	NR2..3.3 V	E06	AAE322-005	01	NR2 S..3.3 %/K	E06
clamping voltage $V_{(CL)R}$ $V_{(CL)R}$				temperature coefficient S_Z S_Z S_Z			
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				The maximum temperature coefficient (in %/K) of a voltage reference diode or voltage stabilizer diode, at specified working current. AAE500-005 = working current			
AAE315-005	02	NR2..3.3 A	E01	AAE323-005	01	NR2..3.3 Ohm	E33
non-rep peak reverse current $@I_{RSM}$ $@I_{RSM}$				differential resistance r_{dif} r_{dif}			
The non-repetitive peak reverse current (in A) of a stabilizer diode, as a variable. IEC 60060-1 (1989)				The maximum differential resistance (in Ohm), 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			
AAE316-005	01	NR3..3.3ES2 A	E01				
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.							

AAE324-005	01	NR2..3.3 V	E06	AAE332-005	02	NR3..3.3ES2 s	T07
working voltage		V_Z		virtual front time		@t ₁	
reference voltage		V_Z				@t ₁	
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				The virtual front time t ₁ (in s) of an impulse applied to a stabilizer 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.			
AAE326-005	01	NR2..3.3 Cel	H02	IEC 60060-1(8.24.4) (1989)			
tie point temperature		@T _{tp} @T _{tp}		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%.			
The temperature (in Cel) of the tie point of a voltage regulator diode, as a variable.				AAE333-005	02	NR3..3.3ES2 s	T07
AAE327-006	01	NR1..4 W	H07	virtual time to half-value		@t ₂ @t ₂	
non-rep peak reverse power dis.		P _{ZSM} P _{ZSM} P		The virtual time to half-value t ₂ (in s) of an impulse current applied to a stabilizer diode, as a variable. IEC 60060-1(8.24.5) (1989)			
The maximum non-repetitive peak reverse power dissipation (in W) of a stabilizing diode, at a square wave pulse wit specified time duration and junction temperature prior to the application of the pulse. AAE271-005 = junction temperature AAE028-005 = duration				AAE334-005	01	NR1..4 V	E06
AAE328-005	02	NR2..3.3 Ohm	E33	varistor voltage at 1 mA		U _{var(1mA)} U _{var(1mA)}	
differential resistance		r _{dif} r _{dif}		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.			
The maximum quotient of the delta V _F over delta I _F (in Ohm), of a voltage regulator diode or stabistor at specified forward current and a frequency of 1000 Hz. AAE274-005 = forward current				AAE335-005	01	NR2..3.3 V	E06
AAE329-005	01	NR3 S. 3.3ES2 V/K	E06	reverse voltage stand-off voltage		@V _R @V _R	
temperature coefficient S_F		S _F S _F		The direct voltage (in V) applied to a diode or optoelectronic device in reverse direction, as a variable. IEC 60747-2(II.2.1.4) (1983)			
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				AAE336-005	01	NR1..4 Cel	H02
AAE331-005	01	M..17	A58	mounting base temperature		T _{mb} T _{mb}	
diode package diode envelope		diode package		The maximum temperature (in Cel) of the mounting base of a transistor, diode, trigger device, optoelectronic device or IC. JEDEC 77/B/2.0 (1981)			
Code of the envelope of a diode or trigger device.				AAE337-005	01	NR1..4 Cel	H02
				junction temperature virtual junction temperature		T _j T _j	
				The maximum junction temperature (in Cel) of a transistor, diode, trigger device, optoelectronic device or IC. IEC 60747-1(IV.5.2.3) (1983)			

AAE338-005	01	NR1..4 V	E06	AAE343-005	01	M..3	A51
maximum noise voltage voltage handling capacity		U_n U_n		filter network		@filter	
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. AAE343-005 = filter AAE342-005 = mounting of loudspeaker AAE028-005 = duration				Code of the filter used with a loudspeaker. L = L network S = series network W = without filter			
IEC/TC 84(Sec)38(17.4) (1986)				REMARKS: The L network is a capacitor in series with a coil and loudspeaker in parallel.			
AAE339-005	02	NR3..3.3ES2 Hz	F03	AAE345-005	01	M..3	A58
upper rated frequency		f_{upr} f_{upr}		female entry socket-inlet bottom entry		female entry	
The nominal upper frequency (in Hz) of a loudspeaker.				Code of the entry of a connector. ONE = one-way TWO = two-way (bottom entry)			
IEC/TC 84(Sec)38(19.1) (1986)				AAE347-005	01	M..17	A59
AAE340-005	01	NR3..3.3ES2 Hz	F03	CECC specification		CECC spec	
effective frequency f_{e2}		f_{e2} f_{e2}		CECC code of the specification in which an electric/electronic or electromechanical component is released under the CECC quality assessment system. CECC FEN			
The minimum value of the upper effective frequency (in Hz) of a loudspeaker, microphone or antenna.				REMARKS: CECC = Cenelec Electronic Components Committee Cenelec = European Committee for Electrotechnical Standardization 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			
IEC/TC 84(Sec)38(21.2) (1986)				AAE348-005	01	M..3	A58
REMARKS: For a loudspeaker, the -10 dB frequency.				pinning arrangement		pin arrangement	
AAE341-005	01	NR3..3.3ES2 Hz	F03	Code of the pinning arrangement of a connector. CIR = circular CON = concentric SQU = square STA = staggered			
effective frequency f_{e1}		f_{e1} f_{e1}		AAE349-005	02	M..8	A56
The maximum value of the lower effective frequency (in Hz) of a loudspeaker, microphone or antenna.				connector type		connector type	
IEC/TC 84(Sec)38(21.2) (1986)				Code of the type of a connector, according to its mating part or the type of component to which it will be permanently attached. IEC 60130-15 (1975)			
REMARKS: For a loudspeaker, the -10 dB frequency.				ADP = adaptor BMT = board-mounted excluding socket CBL = cable (free) JUM = jumper PAN = panel if mating part is a connector (fixed) RACK = rack (fixed) SOC = socket WIRE = wire (free) (terminal end)			
AAE342-005	01	M..3	A51				
mounting of loudspeaker		@lsp mounting					
Code of the mounting arrangement of a loudspeaker.							
IEC/TC 84(Sec)38(10.1) (1986)							
BFL = baffle ENC = enclosure HSF = half space free field UNM = unmounted							
REMARKS: 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.							