
Packaging of components for automatic handling - Part 6: Bulk case packaging for surface mounting components (IEC 60286-6:2004)

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EUROPEAN STANDARD

EN 60286-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2004

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English version

Packaging of components for automatic handling
Part 6: Bulk case packaging for surface mounting components
(IEC 60286-6:2004)

Emballage des composants
pour opérations automatisées
Partie 6: Emballage en vrac
des composants pour montage
en surface
(CEI 60286-6:2004)

Gurtung und Magazinierung von
Bauelementen für automatische
Verarbeitung
Teil 6: Schüttgutbehälter für
oberflächenmontierbare Bauelemente
(IEC 60286-6:2004)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 40/1365/FDIS, future edition 2 of IEC 60286-6, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60286-6 on 2004-03-01.

This European Standard supersedes EN 60286-6:1998.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-03-01

The International Electrotechnical Commission (IEC) and CENELEC draw attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning the structure of the bulk case given in 4.1.

The IEC and CENELEC take no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the IEC that he is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with the IEC. Information may be obtained from:

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Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60286-6:2004 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60093	- ¹⁾	Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials	HD 429 S1	1983 ²⁾
ISO 180	- ¹⁾	Plastics Determination of Izod impact strength	EN ISO 180	2000
ISO 2248	- ¹⁾	Packaging - Complete, filled transport packages - Vertical impact test by dropping	EN 22248	1992
ISO 6906	- ¹⁾	Vernier callipers reading to 0,02 mm	-	-
ISO 11469	- ¹⁾	Plastics - Generic identification and marking of plastic products	EN ISO 11469	2000
ISO/IEC 16388	- ¹⁾	Information technology - Automatic identification and data capture techniques - Bar code symbology specifications - Code 39	SIST EN 60286-6:2004	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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Deuxième édition
Second edition
2004-02

**Emballage des composants pour
opérations automatisées –**

**Partie 6:
Emballage en vrac des composants
pour montage en surface**

(standards.iteh.ai)

**Packaging of components
for automatic handling –**

**Part 6:
Bulk case packaging for surface
mounting components**

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –**Part 6: Bulk case packaging for surface mounting components**

FOREWORD

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The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning the structure of the bulk case given in 4.1.

The IEC takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the IEC that he is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with the IEC. Information may be obtained from

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International Standard IEC 60286-6 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This second edition cancels and replaces the first edition issued in 1998. It constitutes an update and a technical revision.

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

FDIS	Report on voting
40/1365/FDIS	40/1382/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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

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PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING –

Part 6: Bulk case packaging for surface mounting components

1 Scope

This part of IEC 60286 is applicable to bulk case packaging capable of containing surface mounting components. The bulk case is designed for transport and storage of components and the supply of components directly or by an appropriate feeder to the placement machine. The bulk case is attached to the automatic handling machine by means of a coupling interface.

NOTE For size limitations of components, see Annex A, Tables A.1, A.2 and A.3.

2 Normative references

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

IEC 60093: *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

ISO 180: *Plastics – Determination of Izod impact strength*

ISO 2248: *Packaging – Complete filled transport packages – Vertical impact test by dropping*

ISO 6906: *Vernier callipers reading to 0,02 mm*

ISO 11469: *Plastics – Generic identification and marking of plastic products*

ISO/IEC 16388: *Information technology – Automatic identification and data capture techniques – Bar code technology specifications – Code 39*

3 Terms and definitions

For the purposes of this document the following definition applies.

3.1

destaticized plastics (electrostatic dissipative plastics)

plastics with a surface resistivity of more than or equal to $1,0 \times 10^5 \Omega$ per square, but less than or equal to $1,0 \times 10^{12} \Omega$ per square.