
Surface mounting technology - Part 2: Transportation and storage conditions of surface mounting devices (SMD) - Application guide

Surface mounting technology -- Part 2: Transportation and storage conditions of surface mounting devices (SMD) - Application guide

Oberflächenmontagetechnik -- Teil 2: Transport- und Lagerungsbedingungen von oberflächenmontierbaren Bauelementen (SMD) - Anwendungseinfaden

Technique du montage en surface -- Partie 2: Transport et stockage des composants pour montage en surface (CSM) - Guide d'application

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Ta slovenski standard je istoveten z: EN 61760-2:1998

ICS:

31.020	Elektronske komponente na splošno	Electronic components in general
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SIST EN 61760-2:2001**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61760-2

April 1998

ICS 31.020

English version

**Surface mounting technology
Part 2: Transportation and storage conditions
of surface mounting devices (SMD)
Application guide
(IEC 61760-2:1998)**

Technique du montage en surface
Partie 2: Transport et stockage
des composants pour montage
en surface (CSM)
Guide d'application
(CEI 61760-2:1998)

Oberflächenmontagetechnik
Teil 2: Transport- und Lagerungs-
bedingungen von oberflächen-
montierbaren Bauelementen (SMD)
Anwendungsleitfaden
(IEC 61760-2:1998)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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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 91/124/FDIS, future edition 1 of IEC 61760-2, prepared by IEC TC 91, Surface mounting technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61760-2 on 1998-04-01.

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) 1999-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2001-01-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61760-2:1998 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60286-3	1991	Packaging of components for automatic handling Part 3: Packaging of leadless components on continuous tapes	HD 143.3 S2 ¹⁾	1992
IEC 60286-4	1991	Part 4: Stick magazines for dual-in-line packages	EN 60286-4 ²⁾	1997
IEC 60286-5 (mod)	1995	Part 5: Matrix trays	EN 60286-5	1997
IEC 60721-3-1	1997	Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities Section 1: Storage	EN 60721-3-1	1997
IEC 60721-3-2	1997	Section 2: Transportation	EN 60721-3-2	1997
IEC 60749	1996	Semiconductor devices Mechanical and climatic test methods	-	-
-	-	Basic Specification: Protection of electrostatic sensitive devices Part 1: General requirements	EN 100015-1	1992
-	-	Part 2: Requirements for low humidity conditions	EN 100015-2	1993

1) HD 143.3 S2 is superseded by EN 60286-3:1998, which is based on IEC 60286-3:1997.

2) EN 60286-4 is superseded by EN 60286-4:1998, which is based on IEC 60286-4:1997.

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**NORME
INTERNATIONALE
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**CEI
IEC**

61760-2

Première édition
First edition
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Technique du montage en surface –

Partie 2:

**Transport et stockage des composants
pour montage en surface (CMS) –
Guide d'application**

(standards.iteh.ai)

Surface mounting technology –

SIST EN 61760-2:2001

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Part 2:

**Transportation and storage conditions
of surface mounting devices (SMD) –
Application guide**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SURFACE MOUNTING TECHNOLOGY –

**Part 2: Transportation and storage conditions
of surface mounting devices (SMD) –
Application guide**

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 co-operation 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 Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 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.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61760-2 has been prepared by IEC technical committee 91: Surface mounting technology.

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

FDIS	Report on voting
91/124/FDIS	91/130/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.

SURFACE MOUNTING TECHNOLOGY –

Part 2: Transportation and storage conditions of surface mounting devices (SMD) – Application guide

1 Scope and object

This International Standard describes the transportation and storage conditions for surface mounting devices (SMDs) that are fulfilled in order to enable trouble free processing of surface mounting devices, both active and passive. (Conditions for printed boards are not taken into consideration.)

The object of this International Standard is to ensure that users of SMDs receive and store products that can be further processed (e.g. positioned, soldered) without prejudice to quality and reliability. Improper transportation and storage of SMDs may cause deterioration, and result in assembly problems such as poor solderability, delamination and "popcorning".

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60286-3:1991, *Packaging of components for automatic handling – Part 3: Packaging of leadless components on continuous tapes*

IEC 60286-4:1991, *Packaging of components for automatic handling – Part 4: Stick magazines for dual-in-line packages*

IEC 60286-5:1995, *Packaging of components for automatic handling – Part 5: Matrix trays*

IEC 60721-3-1:1997, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 1: Storage*

IEC 60721-3-2:1997, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 2: Transportation*

IEC 60749:1996, *Semiconductor devices – Mechanical and climatic test methods*

EN 100015-1:1992, *Protection of electrostatic sensitive devices – Part 1: General requirements*

EN 100015-2:1993, *Protection of electrostatic sensitive devices – Part 2: Requirements for low humidity conditions*