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Surface mounting technology –

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



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SURFACE MOUNTING TECHNOLOGY –

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FOREWORD

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

This second edition cancels and replaces the first edition, published in 1998, and constitutes a technical revision.

The main changes with regard to the previous edition concern:

The standard was updated and editorially revised. Specific reference is made to:

IEC/TS 61340-5-1: Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements

IEC/TS 61340-5-2: Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide

For convenience of the reader, an informative Annex A was added, which contains information about the climatic and mechanical conditions during transportation and storage (extracted from IEC 60721-3-1 and IEC 60721-3-2).

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

CDV	Report on voting
91/569/CDV	91/634/RVC

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.

A list of all the parts in the IEC 61760 series, under the general title *Surface mounting technology*, can be found on the IEC website.

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

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- withdrawn,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

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

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

IEC 60286-4: *Packaging of components for automatic handling – Part 4: Stick magazines for electronic components encapsulated in packages of form E and G*

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

IEC 60286-6: *Packaging of components for automatic handling – Part 6: Bulk case packaging for surface mounting components*

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

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

IEC 60749 (all parts), *Semiconductor devices – Mechanical and climatic test methods*

IEC/TS 61340-5-1: *Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements*

IEC/TS 61340-5-2: *Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide*