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colour inside

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

INTERNATIONAL
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SURFACE MOUNTING TECHNOLOGY –

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

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61760-2:2007. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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

The text of this International Standard is based on the following documents:

Draft	Report on voting
91/1666/CDV	91/1708/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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SURFACE MOUNTING TECHNOLOGY –

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

1 Scope ~~and object~~

This International Standard ~~describes~~ specifies 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 document 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~~ can cause deterioration and result in assembly problems such as poor solderability, delamination and "popcorning".

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 surface mount 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 60721-3-1:2018, *Classification of environmental conditions – Part 3-1: Classification of groups of environmental parameters and their severities –: Storage*

IEC 60721-3-2:2018, *Classification of environmental conditions – Part 3-2: Classification of groups of environmental parameters and their severities –: Transportation and handling*

~~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/TR 61340-5-2, *Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide*~~

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Edition 3.0 2021-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Technique du montage en surface – Partie 2: Conditions de transport et de stockage des composants pour montage en surface (CMS) – Guide d'application



IEC 61760-2:2021-07(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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 –

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

1 Scope

This International Standard specifies 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 document 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 can cause deterioration and result in assembly problems such as poor solderability, delamination and "popcorning".

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60721-3-1:2018, *Classification of environmental conditions – Part 3-1: Classification of groups of environmental parameters and their severities – Storage*

IEC 60721-3-2:2018, *Classification of environmental conditions – Part 3-2: Classification of groups of environmental parameters and their severities – Transportation and handling*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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TECHNIQUE DU MONTAGE EN SURFACE –

Partie 2: Conditions de transport et de stockage des composants pour montage en surface (CMS) – Guide d'application

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Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
91/1666/CDV	91/1708/RVC

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

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

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TECHNIQUE DU MONTAGE EN SURFACE –

Partie 2: Conditions de transport et de stockage des composants pour montage en surface (CMS) – Guide d'application

1 Domaine d'application

La présente Norme internationale spécifie les conditions de transport et de stockage qui sont prises en compte afin de permettre la mise en œuvre sans problème des composants pour montage en surface (CMS), tant actifs que passifs. (Les conditions pour les cartes à circuits imprimés ne sont pas prises en compte.)

L'objet du présent document est de s'assurer que l'utilisateur de composants pour montage en surface reçoit et emmagasine des produits qui pourront être utilisés (par exemple placés, brasés) sans problème de qualité et de fiabilité. Des conditions de transport et de stockage impropres peuvent provoquer une détérioration des CMS et il en résulte des problèmes d'assemblage tels qu'une mauvaise brasabilité, la séparation des couches métallisées des terminaisons et l'effet "pop-corn".

2 Références normatives

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IEC 60721-3-1:2018, *Classification des conditions d'environnement – Partie 3-1: Classification des groupements des agents d'environnement et de leurs sévérités – Stockage*

IEC 60721-3-2:2018, *Classification des conditions d'environnement – Partie 3-2: Classification des groupements des agents d'environnement et de leurs sévérités – Transport et manutention*