SLOVENSKI STANDARD
SIST EN IEC 60749-20-1:2026

01-maj-2026

Nadomešča:
SIST EN 60749-20-1:2009

Polprevodniški elementi - Mehanske in klimatske preskusne metode - 20-1. del: Obdelava, pakiranje, označevanje in pošiljanje elementov za površinsko montažo (SMD), občutljivih na učinkovanje vlage in spajkalne vročine (IEC 60749-20-1:2019)

Semiconductor devices - Mechanical and climatic test methods - Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat (IEC 60749-20-1:2019)

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 20-1: Handhabung, Verpackung, Kennzeichnung und Transport oberflächenmontierbarer Bauelemente, die empfindlich gegen die Kombination von Feuchte und Lötwärme sind (IEC 60749-20-1:2019)

Dispositifs à semi-conducteurs - Méthodes d'essais mécaniques et climatiques - Partie 20-1: Manipulation, emballage, étiquetage et transport des composants pour montage en surface sensibles à l'effet combiné de l'humidité et de la chaleur de brasage (IEC 60749-20-1:2019)

Ta slovenski standard je istoveten z: **EN IEC 60749-20-1:2026**

ICS:

19.020	Preskuševalni pogoji in postopki na splošno	Test conditions and procedures in general
31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general

SIST EN IEC 60749-20-1:2026 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60749-20-1

February 2026

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Supersedes EN 60749-20-1:2009

English Version

Semiconductor devices - Mechanical and climatic test methods - Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat (IEC 60749-20-1:2019)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 60749-20-1:2026 E

European foreword

This document (EN IEC 60749-20-1:2026) consists of the text of IEC 60749-20-1:2019 prepared by IEC/TC 47 "Semiconductor devices".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2027-02-28
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2029-02-28

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Endorsement notice

The text of the International Standard IEC 60749-20-1:2019 was approved by CEN-CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60749-37	NOTE	Approved as EN IEC 60749-37
IEC 60749-39	NOTE	Approved as EN IEC 60749-39

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60749-20	-	Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat	EN IEC 60749-20	-
IEC 60749-30	-	Semiconductor devices - Mechanical and climatic test methods - Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing	EN IEC 60749-30	-

IEC 60749-20-1

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Semiconductor devices – Mechanical and climatic test methods – Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat

Dispositifs à semiconducteurs – Méthodes d'essais mécaniques et climatiques – Partie 20-1: Manipulation, emballage, étiquetage et transport des composants pour montage en surface sensibles à l'effet combiné de l'humidité et de la chaleur de brasage

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SEMICONDUCTOR DEVICES – MECHANICAL AND CLIMATIC TEST METHODS –

Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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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This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) updates to subclauses to better align the test method with IPC/JEDEC J-STD-033C, including new sections on aqueous cleaning and dry pack precautions;
b) addition of two annexes on colorimetric testing of HIC (humidity indicator card) and derivation of bake tables.

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

FDIS	Report on voting
47/2565/FDIS	47/2579/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.

A list of all parts in the IEC 60749 series, published under the general title *Semiconductor devices – Mechanical and climatic test methods,* 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.