

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**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60749-20-1

February 2026

ICS 31.080.01

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)**

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
(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)

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- latest date by which the national standards conflicting (dow) 2029-02-28 with this document have to be withdrawn

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-

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IEC 60749-20-1

Edition 2.0 2019-06

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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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

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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

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