
**Polprevodniški elementi - Mehanske in klimatske preskusne metode - 30. del:
Predkondicioniranje nehermetičnih elementov za površinsko namestitev pred
preskušanjem zanesljivosti**

Semiconductor devices - Mechanical and climatic test methods - Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 30:
Behandlung nicht hermetisch verkappter oberflächenmontierbarer Bauelemente vor
Zuverlässigkeitsprüfungen (standards.iteh.ai)

Dispositifs à semiconducteurs - Methodes d'essais mécaniques et climatiques -- Partie
30: Préconditionnement des composants pour montage en surface non hermétiques
avant les essais de fiabilité

Ta slovenski standard je istoveten z: EN 60749-30:2005/A1:2011

ICS:

31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general
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SIST EN 60749-30:2005/A1:2011 **en,fr,de**

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[SIST EN 60749-30:2005/A1:2011](https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011)

<https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60749-30/A1

July 2011

ICS 31.080.01

English version

**Semiconductor devices -
Mechanical and climatic test methods -
Part 30: Preconditioning of non-hermetic surface mount devices prior to
reliability testing
(IEC 60749-30:2005/A1:2011)**

Dispositifs à semiconducteurs -
Méthodes d'essais mécaniques et
climatiques -
Partie 30: Préconditionnement des
composants pour montage en surface non
hermétiques avant les essais de fiabilité
(CEI 60749-30:2005/A1:2011)

Halbleiterbauelemente -
Mechanische und klimatische
Prüfverfahren -
Teil 30: Behandlung nicht hermetisch
verkappter oberflächenmontierbarer
Bauelemente vor
Zuverlässigkeitsprüfungen
(IEC 60749-30:2005/A1:2011)

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<https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011>

This amendment A1 modifies the European Standard EN 60749-30:2005; it was approved by CENELEC on 2011-06-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 47/2019/CDV, future amendment 1 to IEC 60749-30:2005, prepared by IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60749-30:2005 on 2011-06-29.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-03-29
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2014-06-29

Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 1:2011 to the International Standard IEC 60749-30:2005 was approved by CENELEC as an amendment to the European Standard without any modification.

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<https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011>

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Replace IEC 60749-20:2002 by:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60749-20	2008	Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat	EN 60749-20	2009

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[SIST EN 60749-30:2005/A1:2011](https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011)

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IEC 60749-30

Edition 1.0 2011-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

**Semiconductor devices – Mechanical and climatic test methods –
Part 30: Preconditioning of non-hermetic surface mount devices prior to
reliability testing**

**Dispositifs à semiconducteurs – Méthodes d'essais mécaniques
et climatiques –**

**Partie 30: Préconditionnement des composants pour montage en surface non
hermétiques avant les essais de fiabilité**

INTERNATIONAL
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COMMISSION
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ICS 31.080.01

ISBN 978-2-88912-506-7

FOREWORD

This amendment has been prepared by IEC technical committee 47: Semiconductor devices.

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

CDV	Report on voting
47/2019/CDV	47/2075/RVC

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

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

2 Normative references

[SIST EN 60749-30:2005/A1:2011](https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011)

[https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-](https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011)

[3624d9fb4497/sist-en-60749-30-2005-a1-2011](https://standards.iteh.ai/catalog/standards/sist/cd92382f-34fc-429a-a8c0-3624d9fb4497/sist-en-60749-30-2005-a1-2011)

Replace the existing fourth reference with the following:

IEC 60749-20:2008, *Semiconductor devices – Mechanical and climatic test methods – Part 20: Resistance of plastic-encapsulated SMDs to the combined effects of moisture and soldering heat*

4 Test apparatus and materials

4.2 Solder equipment

Replace the existing item d) with the following

- d) Wave-solder equipment capable of maintaining the conditions of item 5.4.4 of IEC 60749-20:2008.

5 Procedure

5.1 General

Replace the final sentence with the following:

However, the soak sequence in 5.5 needs to be consistent with the floor life information in Tables 1 and 2.

5.5 Soak conditions for dry-packed SMDs

Replace the existing first sentence with the following:

The following soak conditions shall apply.

5.5.1 Method A for dry-packed SMDs in accordance with IEC 60749-20

Replace the existing first sentence with the following :

This test shall be carried out in accordance with 5.3.3.2, Method A, of IEC 60749-20:2008 and Table 1 of this standard.

Table 1 – Moisture soak conditions for dry-packed SMDs (method A)

Delete the existing Table 1.

5.5.2 Method B for dry-packed SMDs in accordance with IEC 60749-20

Replace the existing text of this subclause with the following:

This shall be carried out in accordance with 5.3.3.3, Method B, of IEC 60749-20:2008 and Table 2 of this standard

Table 2 – Required soak times in hours for method B, conditions B2 – B6 (MSL levels 3 - 6)

Delete the existing Table 2.

5.6 Method C for soak conditions for non-dry-packed SMDs in accordance with IEC 60749-20

Re-title this subclause with the following:

5.6 Soak conditions for non-dry-packed SMDs in accordance with IEC 60749-20:2008

Replace the existing text of this subclause with the following: