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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60749-30

September 2020

ICS 31.080.01

Supersedes EN 60749-30:2005 and all of its amendments and corrigenda (if any)

English Version

Semiconductor devices - Mechanical and climatic test methods - Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing (IEC 60749-30:2020)

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 (IEC 60749-30:2020)

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 30: Behandlung nicht hermetisch verkappter oberflächenmontierbarer Bauelemente vor Zuverlässigkeitsprüfungen (IEC 60749-30:2020)

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The text of document 47/2633(F)/FDIS, future edition 2 of IEC 60749-30, prepared by IEC/TC 47 “Semiconductor devices” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60749-30:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-06-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-09-21

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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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.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60749-4	-	Semiconductor devices - Mechanical and climatic test methods - Part 4: Damp heat, steady-state, highly accelerated stress test (HAST)	EN 60749-4	-
IEC 60749-5	-	Semiconductor devices - Mechanical and climatic test methods - Part 5: Steady-state temperature humidity bias life test	EN 60749-5	-
IEC 60749-11	-	Semiconductor devices - Mechanical and climatic test methods - Part 11: Rapid change of temperature - Two-fluid-bath method	EN 60749-11	-
IEC 60749-20	2020	Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat	FprEN 60749-20	2020
IEC 60749-24	-	Semiconductor devices - Mechanical and climatic test methods - Part 24: Accelerated moisture resistance - Unbiased HAST	EN 60749-24	-
IEC 60749-25	2003	Semiconductor devices - Mechanical and climatic test methods - Part 25: Temperature cycling	EN 60749-25	2003
IEC 60749-33	-	Semiconductor devices - Mechanical and climatic test methods - Part 33: Accelerated moisture resistance - Unbiased autoclave	EN 60749-33	-

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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



IEC 60749-30:2020-08(en-fr)

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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

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SEMICONDUCTOR DEVICES – MECHANICAL AND CLIMATIC TEST METHODS –

Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing

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International Standard IEC 60749-30 has been prepared by IEC technical committee 47: Semiconductor devices.

This second edition cancels and replaces the first edition published in 2005 and Amendment 1:2011. This edition constitutes a technical revision.

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

a) inclusion of new Clause 3;
b) expansion of 6.7 on solder reflow;
c) inclusion of explanatory notes and clarifications.

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

FDIS	Report on voting
47/2633/FDIS	47/2644/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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