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STN EN 60749-6

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Semiconductor devices - Mechanical and climatic test methods - Part 6: Storage at high temperature

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/17

Obsahuje: EN 60749-6:2017, IEC 60749-6:2017

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English Version

Semiconductor devices - Mechanical and climatic test methods - Part 6: Storage at high temperature (IEC 60749-6:2017)

Dispositifs à semiconducteurs - Méthodes d'essais mécaniques et climatiques - Partie 6: Stockage à haute température (IEC 60749-6:2017) Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 6: Lagerung bei hoher Temperatur (IEC 60749-6:2017)

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

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European foreword

The text of document 47/2347/FDIS, future edition 2 of IEC 60749-6, prepared by IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60749-6:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2018-01-07 national level by publication of an identical national standard or by endorsement
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60749-20	NOTE	Harmonized as EN 60749-20.
IEC 60749-43	NOTE	Harmonized as EN 60749-43 1).

¹⁾ At draft stage.



IEC 60749-6

Edition 2.0 2017-03

INTERNATIONAL STANDARD

Semiconductor devices – Mechanical and climatic test methods – Part 6: Storage at high temperature





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INTERNATIONAL STANDARD

Semiconductor devices – Mechanical and climatic test methods – Part 6: Storage at high temperature

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DEVICES –
MECHANICAL AND CLIMATIC TEST METHODS –

Part 6: Storage at high temperature

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International Standard IEC 60749-6 has been prepared by IEC technical committee 47: Semiconductor devices.

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision.

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

- a) additional test conditions;
- b) clarification of the applicability of test conditions.

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

FDIS	Report on voting
47/2347/FDIS	47/2372/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.

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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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SEMICONDUCTOR DEVICES – MECHANICAL AND CLIMATIC TEST METHODS –

Part 6: Storage at high temperature

1 Scope

The purpose of this part of IEC 60749 is to test and determine the effect on all solid state electronic devices of storage at elevated temperature without electrical stress applied. This test is typically used to determine the effects of time and temperature, under storage conditions, for thermally activated failure methods and time-to-failure of solid state electronic devices, including non-volatile memory devices (data-retention failure mechanisms). This test is considered non-destructive but should preferably be used for device qualification. If such devices are used for delivery, the effects of this highly accelerated stress test will need to be evaluated.

Thermally activated failure mechanisms are modelled using the Arrhenius equation for acceleration, and guidance on the selection of test temperatures and durations can be found in IEC 60749-43.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN