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Semiconductor devices - Mechanical and climatic test methods - Part 42: Temperature and humidity storage

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. 01/15

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60749-42

October 2014

ICS 31.080.01

English Version

**Semiconductor devices - Mechanical and climatic test methods -
Part 42: Temperature and humidity storage
(IEC 60749-42:2014)**

Dispositifs à semiconducteurs - Méthodes d'essais
mécaniques et climatiques - Partie 42: Stockage de
température et d'humidité
(CEI 60749-42:2014)

Halbleiterbauelemente - Mechanische und klimatische
Prüfverfahren - Teil 42: Lagerung bei Wärme und Feuchte
(IEC 60749-42:2014)

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Comité Européen de Normalisation Electrotechnique
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Foreword

The text of document 47/2200/FDIS, future edition 1 of IEC 60749-42, prepared by IEC/TC 47 "Semiconductor devices." was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60749-42:2014.

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Annex ZA

(normative)

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NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.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 60749-20	-



IEC 60749-42

Edition 1.0 2014-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Semiconductor devices – Mechanical and climatic test methods –
Part 42: Temperature and humidity storage**

**Dispositifs à semiconducteurs – Méthodes d'essais mécaniques et climatiques –
Partie 42: Stockage de température et d'humidité**



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IEC 60749-42

Edition 1.0 2014-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Semiconductor devices – Mechanical and climatic test methods –
Part 42: Temperature and humidity storage**

**Dispositifs à semiconducteurs – Méthodes d'essais mécaniques et climatiques –
Partie 42: Stockage de température et d'humidité**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SEMICONDUCTOR DEVICES –
MECHANICAL AND CLIMATIC TEST METHODS –****Part 42: Temperature and humidity storage**

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

FDIS	Report on voting
47/2200/FDIS	47/2204/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.

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SEMICONDUCTOR DEVICES – MECHANICAL AND CLIMATIC TEST METHODS –

Part 42: Temperature and humidity storage

1 Scope

This part of IEC 60749 provides a test method to evaluate the endurance of semiconductor devices used in high temperature and high humidity environments.

This test method is used to evaluate the endurance against corrosion of the metallic interconnection of chips of semiconductor devices contained in plastic moulded and other types of packages. It is also used as a means of accelerating the leakage phenomena due to the moisture penetration through the passivation film and as a pre-conditioning for various kinds of tests.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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*

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