

**SLOVENSKI STANDARD
SIST EN 60068-2-58:2001****01-marec-2001****BUXca Yý U****SIST EN 60068-2-58:2005**

Environmental testing - Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)

Environmental testing -- Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)

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Umweltprüfungen -- Teil 2-58: Prüfungen - Prüfung Td: Prüfverfahren für Lötbarkeit, Widerstandsfähigkeit gegenüber Auflösen der Metallisierung und Lötwärmebeständigkeit bei oberflächenmontierbaren Bauelemente (SMD)

SIST EN 60068-2-58:2001
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Essais d'environnement -- Partie 2-58: Essais - Essai Td: Méthodes d'essai de la soudabilité, de la résistance de la métallisation à la dissolution et de la résistance à la chaleur de soudage des composants pour montage en surface (CMS)

Ta slovenski standard je istoveten z: EN 60068-2-58:1999**ICS:**

19.040	Preskušanje v zvezi z okoljem	Environmental testing
31.190	Sestavljeni elektronski elementi	Electronic component assemblies

SIST EN 60068-2-58:2001**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60068-2-58

April 1999

ICS 19.040; 31.190

Supersedes HD 323.2.58 S1:1991

English version

Environmental testing
Part 2-58: Tests - Test Td: Test methods for solderability,
resistance to dissolution of metallization and to soldering heat of
surface mounting devices (SMD)
(IEC 60068-2-58:1999)

Essais d'environnement
Partie 2-58: Essais - Essai Td: Méthodes
d'essai de la soudabilité, de la
résistance de la métallisation à la
dissolution et de la résistance à la
chaleur de soudage des composants
pour montage en surface (CSM)
(CEI 60068-2-58:1999)

Unweltprüfungen
Teil 2-58: Prüfungen - Prüfung Td:
Prüfverfahren für Lötbarkeit,
Widerstandsfähigkeit gegenüber
Auflösen der Metallisierung und
Lötwärmebeständigkeit bei
oberflächenmontierbaren
Bauelemente (SMD)
(IEC 60068-2-58:1999)

This European Standard was approved by CENELEC on 1999-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 91/157/FDIS, future edition 2 of IEC 60068-2-58, prepared by IEC TC 50, Environmental testing, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60068-2-58 on 1999-04-01.

This European Standard supersedes HD 323.2.58 S1:1991.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2000-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-01-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annex B is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60068-2-58:1999 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1 ¹⁾	1994
IEC 60068-2-20	1979	Part 2: Tests - Test T: Soldering	HD 323.2.20 S3 ²⁾	1988
IEC 60068-2-44	1995	Part 2: Tests - Guidance on Test T: Soldering	EN 60068-2-44	1995
IEC 60068-2-54	1985	Part 2: Tests - Test TA: Soldering Solderability testing by the wetting balance method	HD 323.2.54 S1	1987
IEC 60068-2-69	1995	Part 2: Tests - Test Te: Solderability testing of electronic components for surface mount technology by the wetting balance method	EN 60068-2-69	1996
IEC 60249-2-4	1987	Base materials for printed circuits Part 2: Specifications - Specification No. 4: Epoxy woven glass fabric copper-clad laminated sheet, general purpose grade	EN 60249-2-4 ³⁾ + corr. March	1994 1994
IEC 60749	1996	Semiconductor devices - Mechanical and climatic test methods	EN 60749	1999

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1) EN 60068-1 includes the corrigendum October 1988 and A1:1992 to IEC 60068-1:1988.

2) HD 323.2.20 S3 includes A2:1987 to IEC 60068-2-20.

3) EN 60249-2-4 includes A2:1992 to IEC 60249-2-4.

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INTERNATIONAL STANDARD

IEC 60068-2-58

Second edition
1999-01

Environmental testing –

Part 2-58:

**Tests – Test Td – Test methods for solderability,
resistance to dissolution of metallization
and to soldering heat of surface mounting
devices (SMD)**

Essais d'environnement –

Partie 2-58:

*Essais – Essai Td – Méthodes d'essai de la soudabilité,
de la résistance de la métallisation à la dissolution
et de la résistance à la chaleur de soudage
des composants pour montage en surface*

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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ENVIRONMENTAL TESTING –

Part 2-58: Tests – Test Td – Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)

1 Scope

This part of IEC 60068 outlines test Td, applicable to surface mounting devices (SMD). Soldering tests applicable to SMD in IEC 60068-2-69 and to other electrotechnical products are in IEC 60068-2-20 and IEC 60068-2-54, for which guidance is given in IEC 60068-2-44.

This standard provides standard procedures for determining the solderability, resistance to dissolution of metallization and resistance to soldering heat of surface mounting devices (SMD) (hereinafter referred to as specimens).

The procedures use either a solder bath or reflow method and are applicable only to specimens or products designed to withstand short term immersion in molten solder or limited exposure to reflow systems.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60068. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60068 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-20:1979, *Environmental testing – Part 2: Tests – Test T: Soldering*

IEC 60068-2-44:1995, *Environmental testing – Part 2: Tests – Guidance on test T: Soldering*

IEC 60068-2-54:1985, *Environmental testing – Part 2: Tests – Test Ta: Soldering – Solderability testing by the wetting balance method*

IEC 60068-2-69:1995, *Environmental testing – Part 2: Tests – Test Te: Solderability testing of electronic components for surface mount technology by the wetting balance method*

IEC 60249-2-4:1987, *Base materials for printed circuits – Part 2: Specifications – Specification No. 4: Epoxide woven, glass fabric, copper-clad laminated sheet, general purpose grade*

IEC 60749:1996, *Semiconductor devices – Mechanical and climatic test methods*

3 Terms and definitions

For the purpose of this part of IEC 60068, the terms and definitions as defined in IEC 60068-1 and IEC 60068-2-20 apply.