SLOVENSKI STANDARD
SIST EN 60749-27:2007/A1:2013

01-januar-2013

Polprevodniški elementi - Mehanske in klimatske preskusne metode - 27. del: Preskušanje občutljivosti na elektrostatične izpraznitve (ESD) - Model stroja (MM)

Semiconductor devices - Mechanical and climatic test methods - Part 27: Electrostatic discharge (ESD) sensitivity testing - Machine model (MM)

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 27: Prüfung der Empfindlichkeit gegen elektrostatische Entladungen (ESD) - Machine Model (MM)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Dispositifs à semiconducteurs - Méthodes d'essais mécaniques et climatiques - Partie 27: Essai de sensibilité aux décharges électrostatiques (DES) - Modèle de machine (MM)

SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687413c2dd/sist-en-60749-27-2007-a1-2013

Ta slovenski standard je istoveten z: EN 60749-27:2006/A1:2012

ICS:

31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general

SIST EN 60749-27:2007/A1:2013 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

SIST EN 60749-27:2007/A1:2013

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687413c2dd/sist-en-60749-27-2007-a1-2013

SIST EN 60749-27:2007/A1:2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60749-27/A1

November 2012

ICS 31.080.01

English version

Semiconductor devices - Mechanical and climatic test methods - Part 27: Electrostatic discharge (ESD) sensitivity testing - Machine model (MM)

(IEC 60749-27:2006/A1:2012)

Dispositifs à semiconducteurs -
Méthodes d'essais mécaniques
et climatiques -
Partie 27: Essai de sensibilité
aux décharges électrostatiques (DES) -
Modèle de machine (MM)
(CEI 60749-27:2006/A1:2012)

Halbleiterbauelemente -
Mechanische und klimatische
Prüfverfahren -
Teil 27: Prüfung der Empfindlichkeit gegen
elektrostatische Entladungen (ESD) -
Machine Model (MM)
(IEC 60749-27:2006/A1:2012)

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687415e2dd/sist-en-60749-27-2007-a1-2013

This amendment A1 modifies the European Standard EN 60749-27:2006; it was approved by CENELEC on 2012-10-30. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey 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

© 2012 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

Ref. No. EN 60749-27:2006/A1:2012 E

SIST EN 60749-27:2007/A1:2013

Foreword

The text of document 47/2135/FDIS, future amendment 1 to edition 2 of IEC 60749-27, prepared by IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60749-27:2006/A1:2012.

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)	2013-07-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2015-10-30

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

Endorsement notice

The text of the International Standard IEC 60749-27:2006/A1:2012 was approved by CENELEC as a European Standard without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687413c2dd/sist-en-60749-27-2007-a1-2013

SIST EN 60749-27:2007/A1:2013

IEC 60749-27

Edition 2.0 2012-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Semiconductor devices – Mechanical and climatic test methods –
Part 27: Electrostatic discharge (ESD) sensitivity testing – Machine model (MM)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Dispositifs à semiconducteurs – Méthodes d'essais mécaniques et climatiques –
Partie 27: Essai de sensibilité aux décharges électrostatiques (DES) – Modèle de machine (MM)

SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7695-2b6b-45f5-88cd-24687413c2dd/sist-en-60749-27-2007-a1-2013

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX C

ICS 31.080.01

ISBN 978-2-83220-341-5

Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

® Registered trademark of the International Electrotechnical Commission
Marque déposée de la Commission Electrotechnique Internationale

SIST EN 60749-27:2007/A1:2013

FOREWORD

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

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

FDIS	Report on voting
47/2135/FDIS	47/2144/RVD

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 amendment and the base 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)
SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687413c2dd/sist-en-60749-27-2007-a1-2013

3 Terms and definitions

Add the following new definition:

3.4
ringing
noise component caused by a large inductance in the discharge circuit

SIST EN 60749-27:2007/A1:2013

5.1 General

Table 1 – Waveform specification

Replace the existing table by the following new table:

Level	Equivalent voltage V	I_{p1} peak current through a shorting wire A (± 15 %)[a]	I_{PR} peak current through a 500 Ω resistor A	I_{100} current through a 500 Ω resistor at 100 ns A (± 15 %)
1	100	1,7 (1,5)	–	–
2	200	3,5 (3,0)	–	–
3	400	7,0 (6,0)	$<I_{100} \times 4,5$	0,29
4	800	14,0 (12,0)	–	–

[a] Values in parentheses are the peak current value without ringing.

Add, at the end of the paragraph concerning t_{pm}*, in the "Requirements for Figure 2", the following sentences:*

The inductance (L) which is related to t_{pm} shall be controlled to meet the above specified pulse period. The recommended value is 750 nH.

Insert, between Subclauses 5.1 and 5.2, the following new Subclause 5.3:

iTeh STANDARD PREVIEW
(standards.iteh.ai)

5.3 Extra consideration for waveform specifications

The peak current I_{p1} without ringing shall be verified against the values in Table 1.

SIST EN 60749-27:2007/A1:2013
https://standards.iteh.ai/catalog/standards/sist/2bdb7693-2ebb-4546-8b5c-24687413c2dd/sist-en-60749-27-2007-a1-2013

____