



SLOVENSKI STANDARD
SIST EN 60747-5-1:2002/A1:2004
01-november-2004

Diskretni polprevodniki in integrirana vezja - 5-1. del: Optoelektronske naprave - Splošno - Dopnilo A1 (IEC 60747-5-1:1997/A1:2001)

Discrete semiconductor devices and integrated circuits -- Part 5-1: Optoelectronic devices - General

Einzel-Halbleiterbauelemente und integrierte Schaltungen -- Teil 5-1: Optoelektronische Bauelemente - Allgemeines

Dispositifs discrets à semiconducteurs et circuits intégrés -- Partie 5-1: Dispositifs optoélectroniques - Généralités

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Ta slovenski standard je istoveten z: EN 60747-5-1:2001/A1:2002

ICS:

31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general
31.200	Integrirana vezja, mikroelektronika	Integrated circuits. Microelectronics
31.260	Optoelektronika, laserska oprema	Optoelectronics. Laser equipment

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EUROPEAN STANDARD

EN 60747-5-1/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2002

ICS 31.080.01

English version

Discrete semiconductor devices and integrated circuits
Part 5-1: Optoelectronic devices –
General
(IEC 60747-5-1:1997/A1:2001)

Dispositifs discrets à semiconducteurs
et circuits intégrés
Partie 5-1: Dispositifs optoélectroniques -
Généralités
(CEI 60747-5-1:1997/A1:2001)

Einzel-Halbleiterbauelemente
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[SIST EN 60747-5-1:2002/A1:2004](https://standards.iteh.ai/catalog/standards/sist/3110564b-8694-467c-c612-8910b122a918/iec-60747-5-1-2001-a1-2002)

This amendment A1 modifies the European Standard EN 60747-5-1:2001; it was approved by CENELEC on 2002-02-01. 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 Central Secretariat 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 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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 amendment 1:2001 to the International Standard IEC 60747-5-1:1997, prepared by SC 47E, Discrete semiconductor devices, of IEC TC 47, Semiconductor devices, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 60747-5-1:2001 on 2002-02-01 without any modification.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2003-02-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2005-02-01

Endorsement notice

The text of amendment 1:2001 to the International Standard IEC 60747-5-1:1997 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60747-5-1

1997

AMENDEMENT 1
AMENDMENT 1
2001-03

Amendement 1

**Dispositifs discrets à semiconducteurs
et circuits intégrés –**

Partie 5-1:
Dispositifs optoélectroniques – Généralités
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Amendment 1
<https://standards.iteh.ai/catalog/standards/sist/3110564b-8694-467c-951d-e6cd561aaa3b/sist-en-60747-5-1-2002-a1-2004>

**Discrete semiconductor devices
and integrated circuits –**

Part 5-1:
Optoelectronic devices – General

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International Electrotechnical Commission 3, rue de Varembe Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

D

For price, see current catalogue
Pour prix, voir catalogue en vigueur

FOREWORD

This amendment has been prepared by subcommittee 47E: Discrete semiconductor devices, of IEC technical committee 47: Semiconductor devices.

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

FDIS	Report on voting
47E/178/FDIS	47E/184/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 the base publication and its amendments will remain unchanged until 2004. At this date, the publication will be

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

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4.13 Photocoupler, optocoupler

Add the following new subclauses:
[SIST EN 60747-5-1:2002/A1:2004](https://standards.iteh.ai/catalog/standards/sist/3110564b-8694-467c-951d-e6cd561aaa3b/sist-en-60747-5-1-2002-a1-2004)

4.13.1 DC input photocoupler/optocoupler

photocoupler/optocoupler consisting at the input of an optoelectronic emitter to which d.c. current is applied

4.13.2 AC input photocoupler/optocoupler

photocoupler/optocoupler consisting at the input of an antiparallel optoelectronic emitter to which a.c. current is applied

4.13.3 phototransistor photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a phototransistor

NOTE A base terminal may or may not be provided.

4.13.4 photodarlington photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a Darlington phototransistor

NOTE A base terminal may or may not be provided.

4.13.5 photothyristor photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a photothyristor

NOTE A gate terminal may or may not be provided.

4.13.6 phototriac photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a phototriac

4.13.7 IC photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a photodiode/phototransistor and an integrated circuit

4.13.8 FET photocoupler/optocoupler

photocoupler/optocoupler with one or more field-effect transistors (FETs) in its output stage

NOTE A FET is activated by photo-elements or by direct optical radiation.

4.13.9 photodiode photocoupler/optocoupler

photocoupler/optocoupler whose photosensitive element is a photodiode

4.13.10 IC input photocoupler/optocoupler

photocoupler/optocoupler whose input elements consist of an integrated circuit and an optoelectronic emitter

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6 Terms related to ratings and characteristics

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Replace on pages 31 and 33, the title of subclauses 6.2.6.2 and 6.2.7.2 by the following new title:

Spectrum bandwidth $\Delta\lambda$

Replace, on page 35, the title of subclause 6.2.7.3, by the following new title:

Line width $\Delta\lambda_L$

Replace, on page 37, in 6.2.7.6, the term "spectral radiation bandwidth" by:

Spectrum bandwidth

Page 47

6.4 Photocouplers, optocouplers

Add, on page 55, the following new subclauses:

6.4.17 Repetitive peak voltage**6.4.17.1 repetitive peak off-state voltage**

maximum applicable repetitive peak forward voltage between anode and cathode in off state under specified gate conditions

NOTE The repetitive voltage has a slew rate of less than the specified critical rate of rise of off-state voltage (dv/dt).

6.4.17.2 repetitive peak reverse voltage

maximum applicable repetitive peak reverse voltage between anode and cathode under specified gate conditions

6.4.17.3 RMS on-state current

maximum applicable root-mean-square forward current between anode and cathode in on state under specified gate conditions

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