BS EN 60747-5-5:2011+A1:2015

BSI Standards Publication

Semiconductor devices — Discrete devices

Part 5-5: Optoelectronic devices — Photocouplers

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This British Standard is the UK implementation of EN 60747-5-5:2011+A1:2015. It is identical to IEC 60747-5-5:2007, incorporating amendment 1:2013. It supersedes BS EN 60747-5-5:2011, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1⟩ ⟨A1.

The UK participation in its preparation was entrusted to Technical Committee EPL/47, Semiconductors.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
30 June 2015	Implementation of IEC amendment 1:2013 with CENELEC endorsement A1:2015

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English version

Semiconductor devices - Discrete devices - Part 5-5: Optoelectronic devices - Photocouplers

(IEC 60747-5-5:2007)

Dispositifs à semiconducteurs -
Dispositifs discrets -
Partie 5-5: Dispositifs optoélectroniques -
Photocoupleurs
(CEI 60747-5-5:2007)

Halbleiterbauelemente -
Einzel-Halbleiterbauelemente -
Teil 5-5: Optoelektronische Bauelemente -
Optokoppler
(IEC 60747-5-5:2007)

This European Standard was approved by CENELEC on 2011-01-02. 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.

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

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Foreword

The text of document 47E/332/FDIS, future edition 1 of IEC 60747-5-5, prepared by SC 47E, Discrete semiconductor devices, of IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60747-5-5 on 2011-01-02.

This EN 60747-5-5:2011 replaces the clauses for photocouplers (or optocouplers) described in EN 60747-5-1, EN 60747-5-2 and EN 60747-5-3, including their amendments.

The contents for phototransistors and photothyristors in EN 60747-5-1, EN 60747-5-2 and EN 60747-5-3, including their amendments, will be considered obsolete as of the effective date of publication of this standard.

NOTE Photocouplers that are certified to the previous version of the photocoupler standard, namely EN 60747-5-1/2/3, should be considered in compliance with the requirements and provisions of EN 60747-5-5.

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

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)	2012-01-02
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-01-02

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60747-5-5:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60270:2000	NOTE Harmonized as EN 60270:2001 (not modified).
IEC 60747-5-1:1997	NOTE Harmonized as EN 60747-5-1:2001 (not modified).
IEC 60747-5-2:1997	NOTE Harmonized as EN 60747-5-2:2001 (not modified).
IEC 60747-5-3:1997	NOTE Harmonized as EN 60747-5-3:2001 (not modified).

Foreword to amendment A1

This document (EN 60747-5-5:2011/A1:2015) consists of the text of IEC 60747-5-5:2007/A1:2013 prepared by SC 47E "Discrete semiconductor devices" of IEC/TC 47 "Semiconductor devices".

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)	2016-01-19
– latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-01-19

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The text of the International Standard IEC 60747-5-5:2007/A1:2013 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

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

Publication	Year	Title	EN/HD	Year
IEC 60065 (mod)	2001	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 + corr. August + A11	2002 2007 2008
IEC 60068-1	1988	Environmental testing - Part 1: General and guidance	EN 60068-1 1)	1994
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-14	1984	Environmental testing - Part 2: Tests - Test N: Change of temperature	EN 60068-2-14 2) 3)	1999
IEC 60068-2-17	1994	Environmental testing - Part 2: Tests - Test Q: Sealing	EN 60068-2-17	1994
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-30	2005	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60068-2-58	2004	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)	EN 60068-2-58 + corr. December	2004 2004
IEC 60068-2-78	2001	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2001

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1) EN 60068-1 includes A1 to IEC 60068-1 + corr. October 1988.

2) EN 60068-2-14 includes A1 to IEC 60068-2-14.

3) EN 60068-2-14 is superseded by EN 60068-2-14:2009, which is based on IEC 60068-2-14:2009.

Publication	Year	Title	EN/HD	Year
IEC 60112	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
IEC 60216-1	2001	Electrical insulating materials - Properties of thermal endurance - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2001
IEC 60216-2	2005	Electrical insulating materials - Thermal endurance properties - Part 2: Determination of thermal endurance properties of electrical insulating materials - Choice of test criteria	EN 60216-2	2005
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 60672-2	1999	Ceramic and glass insulating materials - Part 2: Methods of test	EN 60672-2	2000
IEC 60695-11-5	2004	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005

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