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IEC 60747-16-4

Edition 1.1 2011-04

INTERNATIONAL STANDARD



**Semiconductor devices –
Part 16-4: Microwave integrated circuits – Switches**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

CL

ICS 31.080.99

ISBN 978-2-88912-417-6

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SEMICONDUCTOR DEVICES –

Part 16-4: Microwave integrated circuits – Switches

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This consolidated version of IEC IEC 60747-16-4 consists of the first edition (2004) [documents 47E/256/FDIS and 47E/261/RVD] and its amendment 1 (2009) [documents 47E/358/CDV and 47E/373/RVC]. It bears the edition number 1.1.

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 60747-16-4 has been prepared by subcommittee 47E: Discrete semiconductor devices, of IEC technical committee 47: Semiconductor devices.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of the base publication and its amendments 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- withdrawn,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.

A bilingual version of this publication may be issued at a later date.

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SEMICONDUCTOR DEVICES –

Part 16-4: Microwave integrated circuits – Switches

1 Scope

This part of IEC 60747 provides new measuring methods, terminology and letter symbols, as well as essential ratings and characteristics for integrated circuit microwave switches.

There are many combinations for RF ports in switches, such as SPST (single pole single throw), SPDT (single pole double throw), SP3T (single pole triple throw), DPDT (double pole double throw), etc. Switches in this standard are based on SPDT. However, this standard is applicable to the other types of switches.

2 Normative references

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.

~~IEC 60617-12, Graphical symbols for diagrams – Part 12: Binary logic elements~~

~~IEC 60617-13, Graphical symbols for diagrams – Part 13: Analogue elements~~

IEC 60617, Graphical symbols for diagrams

~~IEC 60747-1(1983), Semiconductor devices – Discrete devices and integrated circuits – Part 1: General~~
Amendment 3 (1996)

IEC 60747-1:2006, Semiconductor devices – Part 1: General

IEC 60747-4, Semiconductor devices – Discrete devices – Part 4: Microwave devices

IEC 60747-16-1:2001, Semiconductor devices – Part 16-1: Microwave integrated circuits – Amplifiers
Amendment 1 (2007)¹

IEC 60748-2, Semiconductor devices – Integrated circuits – Part 2: Digital integrated circuits

IEC 60748-3, Semiconductor devices – Integrated circuits – Part 3: Analogue integrated circuits

IEC 60748-4, Semiconductor devices – Integrated circuits – Part 4: Interface integrated circuits

IEC 61340-5-1:2007, Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements

IEC/TR 61340-5-2:2007, Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide

¹ There exists a consolidated edition 1.1 published in 2007, including the base publication (2001) and its Amendment 1 (2007).