

INTERNATIONAL STANDARD

AMENDMENT 1

Semiconductor devices – iTeh Standards
Part 16-3: Microwave integrated circuits – Frequency converters

(<https://standards.iteh.ai>)
Document Preview

[IEC 60747-16-3:2002/AMD1:2009](https://standards.iteh.ai/catalog/standards/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009)

<https://standards.iteh.ai/catalog/standards/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009>





THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2009 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.

If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland
Email: inmail@iec.ch
Web: www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

- Catalogue of IEC publications: www.iec.ch/searchpub

The IEC on-line Catalogue enables you to search by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, withdrawn and replaced publications.

- IEC Just Published: www.iec.ch/online_news/justpub

Stay up to date on all new IEC publications. Just Published details twice a month all new publications released. Available on-line and also by email.

- Electropedia: www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 20 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary online.

- Customer Service Centre: www.iec.ch/webstore/custserv

If you wish to give us your feedback on this publication or need further assistance, please visit the Customer Service Centre FAQ or contact us:

Email: csc@iec.ch

Tel.: +41 22 919 02 11

Fax: +41 22 919 03 00

[IEC 60747-16-3:2002/AMD1:2009](http://www.iec.ch/standards/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009)

<https://standards.iteh.ai/document/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009>



IEC 60747-16-3

Edition 1.0 2009-03

INTERNATIONAL STANDARD

AMENDMENT 1

Semiconductor devices –
Part 16-3: Microwave integrated circuits – Frequency converters

Document Preview

[IEC 60747-16-3:2002/AMD1:2009](https://standards.iteh.ai/catalog/standards/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009)

<https://standards.iteh.ai/catalog/standards/iec/ec65d312-5c0e-42ba-8ea5-686d11698bdc/iec-60747-16-3-2002-amd1-2009>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

F

ICS 31.080.99

ISBN 978-2-88910-280-8

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:

CDV	Report on voting
47E/357/CDV	47E/372/RVC

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 maintenance result 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 Standards
(<https://standards.itih.ai>)
Document Preview

CONTENTS

6.12 Intermodulation distortion (P_n/P_1)

Replace the title of this subclause by the following new title:

6.12 Intermodulation distortion (P_1/P_n)

2 Normative references

Replace the existing references IEC 60617-12, IEC 60617-13 and IEC 60747-1 by the following new references:

IEC 60617, *Graphical symbols for diagrams*

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

Add, to the existing list, the following new references:

IEC 60050-702:1992, *International Electrotechnical Vocabulary – Chapter 702: Oscillations, signals and related devices*

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

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*

3 Terms and definitions

Replace term and definition 3.14 and term and definition 3.15 by the following new terms and definitions:

3.14

noise figure, F

see 702-08-57 of IEC 60050-702

NOTE The term "noise figure" expresses "noise factor" in decibels.

3.15

intermodulation distortion, P_1/P_n
see 3.7 of Amendment 1 of IEC 60747-16-1

5.1.1.4 Package identification

Replace, in item b), "or of" by "or".

5.3.1 Detailed block diagram – functional blocks

Replace, in the last sentence of the last paragraph, "IEC 60617-12 or IEC 60617-13" by "IEC 60617".

5.4.1 Electrical limiting values

Replace the existing Table 2 by the following new table:

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

Table 2 – Electrical limiting values

Subclause	Parameters	Min.	Max.
5.4.1.1	Power supply voltage(s)		+
5.4.1.2	Power supply current(s) (where appropriate)		+
5.4.1.3	Terminal voltage(s) (where appropriate)	+	+
5.4.1.4	Terminal current(s) (where appropriate)		+
5.4.1.5	Input power		+
5.4.1.6	LO input power		+
5.4.1.7	Power dissipation		+

5.4.2 Temperatures

Replace the existing item a) by the following new item a):

- a) Operating temperature (ambient or reference-point temperature)

5.6 Electrical characteristics

Replace the first line of the second paragraph by the following new line:

Each characteristic shall be stated: either

Replace parameter 5.6.13 by the following new parameter:

Sub-clause	Parameters	Min.	Typical*	Max.	Types	
					A	B
5.6.13	Intermodulation distortion	+	+		+	+

5.7 Mechanical and environmental ratings, characteristics and data

Replace reference “IEC 60747-1, chapter VI, clause 7” by “5.10 and 5.11 of IEC 60747-1”.

5.8.8 Handling precautions

Replace reference “IEC 60747-1, chapter IX” by “IEC 61340-5-1 and IEC 61340-5-2”.

6.1.1 General precautions

Replace, in the first line of the first paragraph “clause 1 of IEC 60747-1, chapter VII” by “6.3, 6.4 and 6.6 of IEC 60747-1”.

6.1.3 Handling precautions

Replace “IEC 60747-1, Chapter IX, clause 1” by “IEC 61340-5-1 and IEC 61340-5-2”.