

Semiconductor devices — Discrete devices —

**Part 4-2: Microwave diodes and
transistors — Integrated-circuit
microwave amplifiers — Blank detail
specification**

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The UK participation in its preparation was entrusted to Technical Committee EPL/47, Semiconductors, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the IEC title page, pages 2 to 17 and a back cover.

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Semiconductor devices – Discrete devices

Part 4-2: Microwave diodes and transistors – Integrated-circuit microwave amplifiers – Blank detail specification

Dispositifs à semiconducteurs – Dispositifs discrets –

*Partie 4-2:
Diodes et transistors hyperfréquences –
Amplificateurs hyperfréquences pour circuits intégrés –
Spécification particulière-cadre*



Commission Electrotechnique Internationale
International Electrotechnical Commission
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DEVICES – DISCRETE DEVICES –

**Part 4-2: Microwave diodes and transistors –
Integrated-circuit microwave amplifiers –
Blank detail specification**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60747-4-2 has been prepared by subcommittee 47E: Discrete semiconductor devices, of IEC technical committee 47: Semiconductor devices.

This standard is a blank detail specification for integrated-circuit microwave amplifiers.

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

FDIS	Report on voting
47E/142/FDIS	47E/148/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has not been drafted in complete accordance with the ISO/IEC Directives, Part 3.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

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

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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

Other IEC publications quoted in this standard:

Publication Nos.	IEC 60068-2-17:1994, <i>Basic environmental testing procedures – Part 2: Tests – Test Q: Sealing</i>
	IEC 60747-1:1983, <i>Semiconductor devices – Discrete devices – Part 1: General</i>
	IEC 60747-4:1991, <i>Semiconductor devices – Discrete devices – Part 4: Microwave diodes and transistors</i>
	IEC 60747-10:1991, <i>Semiconductor devices – Part 10: Generic specification for discrete devices and integrated circuits</i>
	IEC 60748-1:1984, <i>Semiconductor devices – Integrated circuits – Part 1: General</i>
	IEC 60748-11:1990, <i>Semiconductor devices – Integrated circuits – Part 11: Sectional specification for semiconductor integrated circuit excluding hybrid circuits</i>
	IEC 60749:1996, <i>Semiconductor devices – Mechanical and climatic test methods</i>
	IEC QC 001002:1986, <i>Rules of Procedure of the IEC Quality Assessment System for Electronic Components (IECQ)</i>

SEMICONDUCTOR DEVICES – DISCRETE DEVICES –

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INTRODUCTION

The IEC Quality Assessment System for Electronic Components is operated in accordance with the statutes of the IEC and under the authority of the IEC. The object of this system is to define quality assessment procedures in such a manner that electronic components released by one participating country as conforming with the requirements of an applicable specification are equally acceptable in all other participating countries without the need for further testing.

This blank detail specification is one of a series of blank detail specifications for semiconductor devices and shall be used with the following IEC publications:

IEC 60747-10/QC 700000:1991, *Semiconductor devices – Part 10: Generic specification for discrete devices and integrated circuits*

IEC 60748-11/QC 790100:1990, *Semiconductor devices – Integrated circuits – Part 11: Sectional specification for semiconductor integrated circuits excluding hybrid circuits*

Required information

Numbers shown in brackets on this and the following pages correspond to the following items of required information, which should be entered in the spaces provided.

Identification of the detail specification

- [1] The name of the national standards organization under whose authority the detail specification is issued.
- [2] The IECQ number of the detail specification.
- [3] The numbers and issue numbers of the generic and sectional specifications.
- [4] The national number of the detail specification, date of issue and any further information required by the national system.

Identification of the component

- [5] Main function and type number.
- [6] Information on typical construction (materials, main technology) and package. If the device has several kinds of derivative products, these differences shall be indicated, for example features in the comparison table.
For electrostatic sensitive devices, a note of caution regarding electrostatic sensitivity shall be added in the detail specification.
- [7] Outline drawing, terminal identification, marking and/or reference to the relevant document for outlines.
- [8] Category of assessed quality according to 2.6 of the generic specification.
- [9] Reference data.

[Throughout this standard, the texts given in square brackets are intended to serve as guidance for the specification writer and shall not be included in the detail specification.]

[When confusion may arise as to whether a paragraph is meant as an instruction to the writer or not, it shall be given in brackets.]