

Australian Standard® 2547.2.3—1987

SEMICONDUCTOR DEVICES— Part 2.3—INTEGRATED CIRCUITS— ANALOGUE



STANDARDS ASSOCIATION OF AUSTRALIA

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AUSTRALIAN STANDARD

**SEMICONDUCTOR DEVICES—
Part 2.3
INTEGRATED CIRCUITS—
ANALOGUE**

AS 2547.2.3—1987

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See also preface

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PREFACE

This standard was prepared by the Association's Committee on Semiconductors and Devices. It is reproduced from IEC 748.3-1986 and is one of the standards prepared by IEC/TC 47, Semiconductor Devices.

This standard is one of a series of standards published under the generic designation AS 2547. This standard supersedes

—the existing AS 2547 series (published in 1982 and 1983 and identical to equivalent parts of IEC 147 published between 1966 and 1981);

—AS C366, Part 4—1978 and Part 5—1978 (equivalent to IEC 147-4, IEC 147-5 and IEC 147-5A);

—AS C367 (endorsement of IEC 148-1969); and

—AS 1967 (identical to IEC 147-1D and 1E).

The purpose of IEC 747 is to reorganize the material originally presented in the IEC 147* and IEC 148† series on semiconductor devices and letter symbols representing them, into a device oriented publication. This is now republished as follows:

(a) Specific requirements for integrated circuits—now IEC 748.

(b) Mechanical and climatic test methods—now IEC 749.

It was in view of the above reorganization that Committee TE/12 agreed to integrate the entire series into one series of Australian standards using the generic designation AS 2547. The relationship with the three IEC standards is as follows:

(i) Part 1.1 onwards—identical with the IEC 747 series.

(ii) Part 2.1 onwards—identical with the IEC 748 series.

(iii) Part 3—identical with IEC 749.

For the purpose of this Australian standard and all other standards in this AS 2547 series, the text of the reproduced IEC Publications should be modified as follows:

A. *Terminology.* The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.

B. *Cross-references.* The reference to IEC Publications should be replaced by references to the appropriate Australian Standards as follows:

<i>References to IEC Publications</i>		<i>Appropriate Australian Standard</i>	
IEC 27	Letter symbols to be used in electrical technology	AS 1046	Letter Symbols for Use in Electrotechnology
IEC 50	International Electro-technical Vocabulary	AS 1852	International Electro-technical Vocabulary
IEC 191	Mechanical standardization of semiconductor devices	AS C379	Mechanical Standardization of Semiconductor Devices
IEC 319	Presentation of reliability data on electronic components	AS 2350	Presentation of Reliability Data on Electronic and Similar Components
IEC 747	Semiconductor devices. Discrete devices and integrated circuits	AS 2547	Semiconductor Devices
747.1	Part 1—General	1.1	Discrete Devices—General
747.2	Part 2—Rectifier diodes	1.2	Discrete Devices—Rectifier Diodes
747.3	Signalling (including switching) and regulating diodes	1.3	Discrete Devices—Signalling (Including Switching) and Regulating Diodes
747.4	R.F. Diodes	1.4	Discrete Devices—R.F. Diodes
747.5	Optoelectronic devices	1.5	Discrete Devices—Optoelectronic Devices

* IEC 147, Essential ratings and characteristics of semiconductor devices and general principles of measuring methods.

† IEC 148, Letter symbols for semiconductor devices and integrated microcircuits.

747.6	Thyristors	1.6	Discrete Devices—Thyristors
747.7	Bipolar transistors	1.7	Discrete Devices—Bipolar Transistors
747.8	Field-effect transistors	1.8	Discrete Devices—Field-effect Transistors
747.9	Miscellaneous devices	1.9	Discrete Devices—Miscellaneous Devices
747.10	Generic specification for discrete devices and integrated circuits (QC 700 000)	1.10	Generic Specification for Discrete Devices and Integrated Circuits (QC 700 000)
747.11	Sectional specification for discrete devices (QC 750 000)	1.11	Sectional Specification for Discrete Devices (QC 750 000)
IEC 748	Semiconductor Devices. Integrated circuits	AS 2547	Semiconductor Devices.
IEC 748.1	General	2.1	Integrated Circuits—General
IEC 748.2	Digital integrated circuits	2.2	Integrated Circuits—Digital
IEC 748.3	Analogue integrated circuits	2.3	Integrated Circuits—Analogue
IEC 748.4	Interface integrated circuits	2.4	Integrated Circuits—Interface
IEC 749	Semiconductor devices. Mechanical and climatic test methods	3.1	Mechanical and Climatic Test Methods

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
SEMICONDUCTOR DEVICES

PART 2.3—INTEGRATED CIRCUITS—ANALOGUE

CHAPTER I: GENERAL

1. Introductory note

As a rule, it will be necessary to use Publications 747-1 and 748-1 together with the present publication. In Publications 747-1 and 748-1, the user will find all basic information on:

- terminology;
- letter symbols;
- essential ratings and characteristics;
- measuring methods;
- acceptance and reliability.

The sequence of the different chapters in the present publication is in accordance with Publication 747-1, Chapter III, Sub-clause 2.1.

2. Purpose

The present publication gives standards on the following sub-categories of analogue integrated circuits:

- operational amplifiers (having two inputs and one output);
- audioamplifiers, videoamplifiers and multichannel amplifiers for telecommunications;
- R.F. and I.F. amplifiers;
- voltage and current regulators;
- analogue signal switching circuits.