# INTERNATIONAL STANDARD

# IEC 60747-1

Second edition 2006-02

Semiconductor devices -

Part 1: General

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### SEMICONDUCTOR DEVICES -

#### Part 1: General

#### FOREWORD

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International Standard IEC 60747-1 has been prepared by IEC technical committee 47: Semiconductor devices.

This second edition of IEC 60747-1 cancels and replaces the first edition (1983) and its amendments 1 (1991), 2 (1993) and 3 (1996).

The main changes with respect to the previous edition are listed below.

- a) The terminology which is now given in the IEV (or which was in conflict with the IEV) has been omitted.
- b) There has been a general revision of guidance on essential ratings and characteristics.
- c) The distinction between general and reference methods of measurement has been removed.
- d) A clause on product discontinuation notice has been added.

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

FDIS	Report on voting
47/1841/FDIS	47/1848/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 been drafted in accordance with the ISO/IEC Directives, Part 2.

The list of all parts of IEC 60747 series, under the general title *Semiconductor devices*, can be found on the IEC website.

The committee has decided that the contents of this 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- withdrawn;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.

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

The contents of the corrigendum of September 2008 have been included in this copy.

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### SEMICONDUCTOR DEVICES –

### Part 1: General

#### 1 Scope

This part of IEC 60747 gives the general requirements applicable to the discrete semiconductor devices and integrated circuits covered by the other parts of IEC 60747 and IEC 60748 (see Annex A).

#### 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 60027 (all parts), Letter symbols to be used in electrical technology

IEC 60050-521, International Electrotechnical Vocabulary (IEV) – Part 521: Semiconductor devices and integrated circuits

IEC 60050-702, International Electrotechnical Vocabulary (IEV) – Part 702: Oscillations, signals and related devices

IEC 60068 (all parts), Environmental testing

IEC 60191-2, Mechanical standardization of semiconductor devices – Part 2: Dimensions

IEC 60747 (all parts), Semiconductor devices

IEC 60748 (all parts), Semiconductor devices – Integrated circuits

IEC 60749-26, Semiconductor devices – Mechanical and climatic test methods – Part 26: Electrostatic discharge (ESD) sensitivity testing – Human body model (HBM)

IEC 61340 (all parts), *Electrostatics* 

QC 001002 (all parts), IEC Quality Assessment Systems for Electronic Components (IECQ) – Rules of procedure

ISO 9000, Quality management systems – Fundamentals and vocabulary