

Harmonized system of quality
assessment for electronic components

**Semiconductor
devices —
Optoelectronic
devices —
Blank detail
specification for laser
diode modules with
pigtail for fibre optic
systems and
subsystems**

ICS 31.260

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 November 1997

© BSI 03-2000

ISBN 0 580 28025 X

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
National foreword	ii
Foreword	iii
Text of IEC 747-12-2	1

National foreword

This British Standard reproduces verbatim IEC 60747-12-2:1995 and implements it as the UK national standard. This standard is a harmonized specification within the IEC system of quality assessment for electronic components (IECQ).

The UK participation in its preparation was entrusted by Technical Committee EPL/47, Semiconductors, to Subcommittee EPL/47/3, Performance of opto-electronic semiconductor devices and liquid crystal displays, 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 subcommittee can be obtained on request to its secretary.

The standard is to be used in conjunction with BS QC 700000 and BS QC 720100. The British Standard which implements the IECQ Rules of Procedure is BS 9000 *General Requirements for a system for electronic components of assessed quality — Part 3:1996 Specification for the national implementation of the IECQ system*.

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 or European 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.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the IEC title page, pages ii to iv, pages 1 to 12 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
747-12-2**

QC 720102

Première édition
First edition
1995-07

Dispositifs à semiconducteurs –

Partie 12:

Dispositifs optoélectroniques –

**Section 2: Spécification particulière cadre
pour modules à diode laser avec fibres amorce
pour systèmes et sous-systèmes à fibres optiques**

Semiconductor devices –

Part 12:

Optoelectronic devices –

**Section 2: Blank detail specification for laser diode
modules with pigtail for fibre optic systems
and sub-systems**



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Contents

	Page
Foreword	iii
Introduction	1
1 Mechanical description	2
2 Short description	2
3 Categories of quality assessment	2
4 Limiting values	3
5 Electrical and optical characteristics	4
6 Marking	6
7 Ordering information	6
8 Test conditions and inspection requirements	6
9 Group D — Qualification approval tests	12
10 Additional information	12

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 cooperation 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.

2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

International Standard IEC 747-12-2 has been prepared by sub-committee 47C: Opto-electronic display and imaging devices, of IEC technical committee 47: Semiconductor devices.

This standard is a blank detail specification for laser diode modules with pigtail for fibre optic systems or sub-systems.

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

DIS	Report on voting
47C/87/DIS	47C/104/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.

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).

Other IEC publications quoted in this standard:

IEC 68-2-14:1984, *Environmental testing — Part 2: Tests — Test N: Change of temperature.*

IEC 191-2:1966, *Mechanical standardizations of semiconductor devices — Part 2: Dimensions.*

IEC 747-1:1983, *Semiconductor devices — Discrete and integrated circuits — Part 1: General.*

IEC 747-5:1992, *Semiconductor devices — Discrete and integrated circuits — Part 5: Optoelectronic devices.*

IEC 747-10:1991, *Semiconductor devices — Discrete and integrated circuits — Part 10: Generic specification for discrete devices and integrated circuits.*

IEC 747-12:1991, *Semiconductor devices — Discrete and integrated circuits — Part 12: Sectional specification for optoelectronic devices.*

IEC 749:1984, *Semiconductor devices — Mechanical and climatic test methods. Amendment 1 (1991)*