BRITISH STANDARD

BS QC 750102:1990
IEC 747-7-1: 1989

Specification for

Harmonized system of quality assessment for electronic components — Semiconductor discrete devices — Blank detail specification —

Ambient-rated bipolar transistors for low and high-frequency amplification

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National foreword

This British Standard has been prepared under the direction of the Electronic Components Standards Policy Committee ECL/-. It is identical with IEC Publication 747-7-1:1989 QC 750102 "*Semiconductor devices — Discrete devices — Part 7: Bipolar transistors. Section 1: Blank detail specification for ambient-rated bipolar transistors for low and high-frequency amplification*" published by the International Electrotechnical Commission (IEC).

Cross-references The British Standard harmonized with QC 001001 and QC 001002 is BS 9000 "*General requirements for a system for electronic components of assessed quality*".

International Standard[a]	Corresponding British Standard
IEC 68-2-17:1978	BS 2011 *Basic environmental testing procedures* Part 2.1Q:1981 *Test Q. Sealing* (Identical)
IEC 747-2:1983	BS 6493 *Semiconductor devices* Part 1 *Discrete devices* Section 1.2:1984 *Recommendations for rectifier diodes* (Identical)
IEC 747-7:1988	BS 6493 *Semiconductor devices* Part 1 *Discrete devices* Section 1.7:1989 *Recommendations for bipolar transistors* (Identical)
IEC 747-10/QC 700000:1984	BS 9970 *Harmonized system of quality assessment for electronic components. Semiconductor devices* Part 0:1985 *Generic specification* (Identical)
IEC 747-11/QC 750000:1985	BS QC 750000:1986 *Harmonized system of quality assessment for electronic components. Discrete semiconductor devices. Sectional specification.* (Identical)
IEC 749:1984	BS 6493 *Semiconductor devices* Part 3:1985 *Mechanical and climatic test methods* (Identical)

[a] Some standards are undated in the text.

There is no corresponding British Standard for IEC 191, but BS 3934 "*Specification for dimensions of semiconductor devices and integrated electronic circuits*" is a related standard.

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, pages 1 to 13 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.

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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:

— 747-10/QC 700000 (1984): *Semiconductor devices, Part 10: Generic specification for discrete devices and integrated circuits.*

— 747-11/QC 750100 (1985): *Semiconductor devices, Part 11: Sectional specification for discrete devices.*

Required information

Numbers shown in brackets on this and the following pages correspond to the following items of required information, which shall 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] Type of component.

[6] Information on typical construction and applications. If a device is designed to satisfy several applications, this shall be stated here. Characteristics, limits and inspection requirements for these applications shall be met. If a device is electrostatic sensitive, or contains hazardous material, e.g. beryllium oxide, a caution statement shall be added in the detail specification.

[7] Outline drawing and/or reference to the relevant standard for outlines.

[8] Category of assessed quality.

[9] Reference data on the most important properties to permit comparison between component types.

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

[Throughout this standard, when a characteristic or rating applies, “x” denotes that a value shall be inserted in the detail specification.]

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[Name (address) of responsible NAI (and possibly of body from which specification is available).] [1]	[Number of IECQ detail specification, plus issue number and/or date.] [2] QC 750102 — ...
ELECTRONIC COMPONENT OF ASSESSED QUALITY IN ACCORDANCE WITH: [3] Generic specification: Publication 747-10/QC 700000 Sectional specification: Publication 747-11/QC 750100 [and national references if different.]	[National number of detail specification.] [4] [This box need not be used if the National number repeats IECQ number.]
DETAIL SPECIFICATION FOR: [5] [Type number(s) of the relevant device(s).] Ordering information: see Clause **7** of this standard.	
1 Mechanical description	**2 Short description**
Outline references: [7] IEC 191-2 .... [mandatory if available] and/or national [if there is no IEC outline.] *Outline drawing* [may be transferred to or given with more details in Clause **10** of this standard.]	Ambient-rated bipolar transistors for: [6] • Low-frequency amplification (LF) • High-frequency amplification (HF) Semiconductor material: [Si] Encapsulation: [cavity or non-cavity.] Application(s): see Clause **5** of this standard. *CAUTION*. Observe precautions for handling ELECTROSTATIC SENSITIVE DEVICES [if applicable.]
	3 Categories of assessed quality
Terminal identification [drawing showing pin assignments, including graphical symbols.]	[From Sub-clause **2.6** of the generic specification.] [8]
	Reference data [9]
Marking: [letters and figures, or colour code]. [The detail specification shall prescribe the information to be marked on the device, if any.] [See Sub-clause **2.5** of generic specification and/or Clause **6** of this standard.] [Polarity indication, if a special method is used.]	
Information about manufacturers who have components qualified to this detail specification is available in the current Qualified Products List.	

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