

Harmonized system of quality assessment for electronic components — Fixed resistors for use in electronic equipment: Sectional specification: fixed surface mounting (chip) resistors

ICS 31.040.10

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Electronic Components Standards Policy Committee (ECL/-) to Technical Committee ECL/4, upon which the following bodies were represented:

- British Telecommunications plc
- Electronic Components Industry Federation
- Electronic Engineering Association
- Ministry of Defence
- National Supervising Inspectorate
- Society of British Aerospace Companies Ltd.
- Telecommunication Engineering and Manufacturing Association

The following body was also represented in the drafting of the standard, through subcommittees and panels:

ERA Technology Ltd.

This British Standard, having been prepared under the direction of the Electronic Components Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 August 1990

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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 115-8 [QC 400600] “*Fixed resistors for use in electronic equipment. Part 2: Sectional specification: Fixed chip resistors*”, including amendment 1:2000, published in 1989 by the International Electrotechnical Commission (IEC).

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by **A1** **A1**.

This standard is a harmonized specification within the IECQ system of quality assessment for electronic components.

For the purposes of this standard **1.1** and **1.2** should be regarded as constituting the scope.

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.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

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Section 1. General

1.1 Scope

This standard is applicable to fixed chip resistors for use in electronic equipment.

1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC Publication 115-1 (1982), the appropriate Quality Assessment procedures, tests and measuring methods and to give general performance requirements for this type of resistor.

Test severities and requirements prescribed in detail specifications referring to this sectional specification shall be of equal or higher performance level, because lower performance levels are not permitted.

1.3 Related documents

IEC Publications:

Publication 63: (1963)	Preferred Number Series for Resistors and Capacitors. Amendment No. 1 (1967) Amendment No. 2 (1977)
Publication 68:	Basic Environmental Testing Procedures.
Publication 115-1: (1982)	Fixed Resistors for Use in Electronic Equipment. Part 1: Generic Specification. Amendment No. 2 (1987) Amendment No. 3 (1989)
Publication 410: (1973)	Sampling Plans and Procedures for Inspection by Attributes.
Publication QC 001001: (1986)	Basic Rules of the IEC Quality Assessment System for Electronic Components. (IECQ).
Publication QC 001002: (1986)	Rules of Procedure of the IEC Quality Assess-System for Electronic Components. (IECQ).

NOTE The above references apply to the current editions except for IEC Publication 68, for which the referenced edition in the applicable test clauses of the generic specification shall be used.

1.4 Information to be given in a detail specification

Detail specifications shall be derived from the relevant blank detail specification.

Detail specifications shall not specify requirements inferior to those of the generic, sectional specification or blank detail specification. When more severe requirements are included, they shall be listed in Sub-clause 1.8 of the detail specification and indicated in the test schedules, for example by an asterisk.

NOTE The information given in the Sub-clauses 1.4.1 and 1.4.3 may, for convenience, be presented in tabular form.

The following information shall be given in each detail specification and the values quoted shall preferably be selected from those given in the appropriate clause of this sectional specification.

1.4.1 Outline drawing and dimensions

There shall be an illustration of the chip resistor as an aid to easy recognition and for comparison of the chip resistor with others. Dimensions and their associated tolerances, which affect interchangeability and mounting, shall be given in the detail specification. All dimensions shall preferably be stated in mm, however when the original dimensions are given in inches, the converted metric dimensions in mm shall be added.

Normally the numerical values shall be given for the length, width and height of the body or, for cylindrical types, the body diameter. When necessary, for example when in a detail specification more than one dissipation value is covered, the dimensions and their associated tolerances shall be placed in a table below the drawing.

When the configuration is other than described above, the detail specification shall state such dimensional information as will adequately describe the chip resistor.