

INTERNATIONAL STANDARD

IEC
60115-9-1

First edition
2003-10

Fixed resistors for use in electronic equipment –

Part 9-1:

Blank detail specification:

Fixed surface mount resistor networks

with individually measurable resistors –

Assessment level EZ

© IEC 2003 — Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

L

For price, see current catalogue

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT –

**Part 9-1: Blank detail specification:
Fixed surface mount resistor networks
with individually measurable resistors –
Assessment level EZ**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60115-9-1 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

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

FDIS	Report on voting
40/1345/FDIS	40/1367/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 committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual edition of this standard may be issued at a later date.

Currently in preview, click buy full vers.

INTRODUCTION

Blank detail specification

A blank detail specification is a supplementary document to the sectional specification and contains requirements for style, layout and minimum content of detail specifications. Detail specifications not complying with these requirements may not be considered as being in accordance with IEC specifications nor shall they be so described.

In the preparation of detail specifications the content of 1.4 of the sectional specification shall be taken into account.

The numbers between square brackets on the first page of the detail specification correspond to the following information which shall be inserted in the position indicated.

Identification of the detail specification

- [1] The "International Electrotechnical Commission" or the National Standards Organization under whose authority the detail specification is drafted.
- [2] The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- [3] The number and issue number of the IEC or national generic specification.
- [4] The IEC number of the blank detail specification.

Identification of the resistor network

- [5] A short description of the type of resistor network.
- [6] Information on typical construction (when applicable).
- [7] Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an annex to the detail specification.
- [8] Application or group of applications covered and/or assessment level.
- [9] Reference data on the most important properties, to allow comparison between the various resistor network types.

[1]	IEC 60115-9-1-XXX QC 400701XXXXXX	[2]
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH:	IEC 60115-9-1 QC 400701	[4]
[3]	FIXED SURFACE MOUNT RESISTOR NETWORKS WITH INDIVIDUALLY MEASURABLE RESISTORS	[5]
Outline drawing: (see Table 1) (... angle projection)		[6]
[7]		[8]
(Other shapes are permitted within the dimensions given)	Assessment level: FZ	[8]
NOTE For [1] to [9]: see previous page.		

Information on the availability of components qualified to
this detail specification is given in the IEC QC 001005

[9]

FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 9-1: Blank detail specification: Fixed surface mount resistor networks with individually measurable resistors – Assessment level EZ

1 General data

1.1 Dimensions, ratings and characteristics

Table 1 – Styles related to dimensions, ratings and characteristics

Style	Rated element dissipation at 70 °C ^{a)}	Rated network dissipation at 70 °C	Limiting element voltage (DC or AC r.m.s.)	Insulation voltage against ambient	Insulation voltage between neighbouring resistors	Dimensions						
						mm						
	W	W	V	V	V	L	W	T	A	B	P	...

^{a)} The detail specification shall specify the conditions under which the rated dissipation applies.

Resistance range¹ ... Ω to ... Ω

Tolerances on rated resistance ± ... %

Climatic category -/-/-/

Stability class ... %

Limits for change of resistance:

– for long-term tests ±(... %R + ... Ω)

– for short term tests ±(... %R + ... Ω)

Temperature coefficient α: ...10⁻⁶/K

¹ The preferred values are those of the E24 and E96 series of IEC 60063.

1.1.1 Derating

Resistors covered by this specification are derated according to the following curve:

(A suitable curve to be included
in the detail specification)

NOTE See also 2.2.3 of the sectional specification.

1.2 Recommended method(s) of mounting (to be inserted)

(See 1.4.2 of IEC 60115-9.)

1.3 Related documents

Generic specification

IEC 60115-1:1999, *Fixed resistors for use in electronic equipment – Part 1: Generic specification*

Sectional specification

IEC 60115-9:2003, *Fixed resistors for use in electronic equipment – Part 9: Sectional specification: Fixed surface mount resistor networks with individually measurable resistors*