

# INTERNATIONAL STANDARD

# IEC 60115-9-1

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## 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

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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

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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- withdrawn;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.

## 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]	Assessment level: EZ	[8]
(Other shapes are permitted within the dimensions given)		
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 <sup>a)</sup>	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	<i>L</i>	<i>W</i>	<i>T</i>	<i>A</i>	<i>B</i>	<i>P</i>	...

<sup>a)</sup> The detail specification shall specify the conditions under which the rated dissipation applies.

Resistance range <sup>1</sup>	... 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 <sup>-6</sup> /K

<sup>1</sup> 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*