INTERNATIONAL STANDARD

IEC 60115-1

QC 400000 Third edition 1999-05

Fixed resistors for use in electronic equipment -

Part 1:

Generic specification

Résistances fixes utilisées dans les équipements électroniques –

Partie 1:

Spécification générique



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Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия

CONTENTS

		F	age		
FO	REWC	PRD	4		
Clau	ıse				
1	Gene	ral	5		
	1.1	Scope	5		
	1.2	Normative references			
2		nical data			
_	2.1	Units and symbols			
	2.2	Definitions			
	2.3	Preferred values Marking			
	2.4	Marking			
	2.5	Coding	11		
3	Quality assessment procedures				
•	3.1	General			
	3.2	Primary stage of manufacture.	12		
	3.3	Subcontracting			
	3.4	Structurally similar components	12		
	3.5	Qualification approval procedures	12		
	3.6	Capability approval procedures	13		
	3.7	Rework and repair	. 19		
	3.8	Release for delivery	. 19		
	3.9	Certified test records of released lots	. 19		
	3.10	Delayed delivery			
	3.11	Alternative test methods	. 19		
	3.12	Manufacture outside the geographical limits of IECQ NSIs	. 20		
	3.13	Unchecked parameters			
4	Test	and measurement procedures			
	4.1	General			
	4.2	Standard atmospheric conditions			
	4.3	Drying			
	4.4	Visual examination and checking of dimensions			
	4.5	Resistance			
	4.6	Insulation resistance (insulated styles only)			
	4.7	Voltage proof			
	4.8	Variation of resistance with temperature			
	4.9	Reactance			
	4.10	Non-linear properties	. 28		
	4.11	Voltage coefficient	. 28		
	4.12	Noise			
	4.13	Overload			
	4.14	Temperature rise	. 29		
	4.15	Robustness of the resistor body	. 30		
	4.16	Robustness of terminations			

Clause		F	Page
4.17	Solderability		. 32
4.18	Resistance t	o soldering heat	. 33
4.19	Rapid chang	e of temperature	. 34
4.20	Bump		. 34
4.21	Shock		. 34
4.22	Vibration		. 34
4.23	Climatic seq	uence	. 35
4.24	Damp heat,	steady state	. 36
4.25	Endurance		. 37
		verload test (for low-power non-wire-wound resistors only)	
4.27	Single-pulse	high-voltage overload testse high-voltage overload test	. 44
4.28	Periodic-puls	se high-voltage overload test	. 47
4.29	Component	solvent resistance	. 50
4.30	Solvent resis	solvent resistancestance of markingr surface mount resistors only)	. 50
4.31	Mounting (fo	r surface mount resistors only)	. 50
4.32	Shear (adhe	sion) test	. 53
4.33	Substrate be	ending test (formerly bond strength of the end face plating)	. 53
Anney A	(normative)	Interpretation of sampling plans and procedures as described	
TITICX A	(Hormative)	in IEC 60410 for use within the IEC quality assessment system for	
		electronic components (IECQ)	. 54
Annex B	(normative)	Rules for the preparation of detail specifications for resistors and	
		capacitors for electronic equipment	. 55
Annex C	(informative)	Example of test equipment for the periodic-pulse high-voltage	
		overload test	
Annex D	(normative)	Layout of the first page of a PCP/CQC specification	. 57
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT -

Part 1: Generic specification

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

This third edition cancels and replaces the second edition published in 1982, amendment 2 (1987), amendment 3 (1989) and amendment 4 (1993).

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

FDIS	Report on voting
40/1087/FDIS	40/1109/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).

Annexes A, B and D form an integral part of this standard.

Annex C is for information only.

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

FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT -

Part 1: Generic specification

1 General

1.1 Scope

This part of IEC 60115 is applicable to fixed resistors for use in electronic equipment.

It establishes standard terms, inspection procedures and methods of test for use in sectional and detail specifications of electronic components for quality assessment or any other purpose.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60115. For dated references, subsequent amendments to, or revisions of any of these publications do not apply. However, parties to agreements based on this part of IEC 60115 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

NOTE - In the case of IEC 60068 standards, use the referenced edition.

IEC 60027 (all parts), Letter symbols to be used in electrical technology

IEC 60050 (all parts), International Electrotechnical Vocabulary (IEV)

IEC 60060-1:1989, High voltage test techniques – Part 1: General definitions and test requirements

IEC 60060-2:1994, High-voltage test techniques - Part 2: Measuring systems

IEC 60062:1992, Marking codes for resistors and capacitors Amendment 1 (1995)

IEC 60063:1963. Preferred number series for resistors and capacitors

Amendment 1 (1967) Amendment 2 (1977)

IEC 60068-1:1988, Environmental testing – Part 1: General and guidance Amendment 1 (1992)

IEC 60068-2-1:1990: Environmental testing - Part 2: Tests - Tests A: Cold

Amendment 1 (1993) Amendment 2 (1994)

IEC 60068-2-2:1974, Environmental testing – Part 2: Tests – Tests B: Dry heat

Amendment 1 (1993)

Amendment 2 (1994)

IEC 60068-2-3:1969, Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state Amendment 1 (1984)

-6-

.IEC 60068-2-6:1995, Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)

IEC 60068-2-13:1983, Environmental testing - Part 2: Tests - Test M: Low air pressure

IEC 60068-2-14:1984, Environmental testing – Part 2: Tests – Test N: Change of temperature Amendment 1 (1986)

IEC 60068-2-20:1979, Environmental testing – Part 2: Tests – Test T: Soldering Amendment 2 (1987)

IEC 60068-2-21:1983, Environmental testing — Part 2: Tests – Test U: Robustness of terminations and integral mounting devices

Amendment 2 (1991)

Amendment 3 (1992)

IEC 60068-2-27:1987, Environmental testing -- Part 2: Tests - Test Ea and guidance: Shock

IEC 60068-2-29:1987, Environmental testing -- Part 2: Tests - Test Eb and guidance: Bump

IEC 60068-2-30:1980, Environmental testing – Part 2: Tests – Test Dis and guidance: Damp heat, cyclic (12 + 12 hour cycle)
Amendment 1 (1985)

IEC 60068-2-45:1980, Environmental testing – Part 2: Tests – Test XA and guidance: Immersion in cleaning solvents
Amendment 1 (1993)

IEC 60068-2-58:1989, Environmental testing Part 2: Tests – Test Td: Solderability, resistance to dissolution of metallization and to soldering heat of Surface Mounting Devices (SMD)

IEC 60195:1965, Method of measurement of current noise generated in fixed resistors

IEC 60249-2-4:1987, Base materials for printed circuits – Part 2: Specifications – Specification No. 4: Epoxide waven glass fabric copper-clad laminated sheet, general purpose grade

IEC 60294:1969, Measurement of the dimensions of a cylindrical component having two axial terminations

IEC 60410:1973, Sampling plans and procedures for inspection by attributes

IEC 60440:1973, Method of measurement of non-linearity in resistors

IEC QC 001002-3: 1998, IEC Quality Assessment System for Electronic Components (IECQ) – Rules of procedure – Part 3: Approval procedures

IEC QC 001003:1998, IEC Quality Assessment System for Electronic Components (IECQ) – Guidance documents

IEC QC 001005:1998, Register of firms, products and services approved under the IECQ system, including ISO 9000

ISO 1000:1992, SI units and recommendations for the use of their multiples and of certain other units