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Radio-frequency connectors

Part 1: Generic specification – General requirements and measuring methods

Connecteurs pour fréquences radioélectriques

Partie 1: Spécification générique – Prescriptions générales et méthodes de mesure

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS

Part 1: Generic specification – General requirements and measuring methods

FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

This standard has been prepared by Sub-Committee 46D: Connectors for r.f. cables, of IEC Technical Committee No. 46: Cables, wires, waveguide, connectors and accessories for communication and signalling.

The text of this standard is based on the following documents: IEC Publications 169-1, 169-1-1, 169-1-3, plus:

Six Months' Rule	Reports on Voting	Two Months' Procedure	Report on Voting
46D(CO)107	46D(CO)129	46D(CO)140	46D(CO)152
46D(CO)122	46D(CO)132		
46D(CO)135	46D(CO)151A	46D(CO)183	46D(CO)202
46D(CO)136	46D(CO)155		
46D(CO)145	46D(CO)169		
46D(CO)147	46D(CO)170		
46D(CO)158	46D(CO)187		

Full information on the voting for the approval of this standard can be found in the Voting Reports 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).

RADIO-FREQUENCY CONNECTORS

Part 1: Generic specification – General requirements and measuring methods

1 Scope

This standard relates to connectors for r.f. transmission lines for use in telecommunications, electronic and similar equipment.

2 Object

This standard serves as a generic specification providing the basis for the sectional standards which apply to individual connector types. It is intended to establish uniform concepts and procedures concerning:

- terminology;
- standard ratings and characteristics;
- testing and measuring procedures concerning electrical and mechanical properties;
- classification of connectors with regard to environmental testing procedures involving temperature, humidity and vibration.

The test methods and procedures of the standard are intended and acceptance for type approval testing. They may also be adopted, by agreement between manufacturer and customer, to serve as a basis for acceptance tests.

3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1169. At the time of publication of this standard, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 1169 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 27: *Letter Symbols to be Used in Electrical Technology.*

IEC 50: *International Electrotechnical Vocabulary.*

IEC 50(151): 1978, *Electrical and Magnetic Devices.*

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance.*

IEC 68-2-1: 1990, *Environmental testing – Part 2: Tests – Test A: Cold.*

IEC 68-2-2: 1974, *Environmental testing – Test B: Dry heat.*

IEC 68-2-3: 1969, *Environmental testing – Test Ca: Damp heat, steady state.*

IEC 68-2-6: 1982, *Environmental testing – Test Fc and guidance: Vibration (sinusoidal).*

IEC 68-2-11: 1981, *Environmental testing – Test Ka: Salt mist.*

IEC 68-2-13: 1983, *Environmental testing – Test M: Low air pressure.*

IEC 68-2-14: 1984, *Environmental testing – Test N: Change of temperature.*

IEC 68-2-17: 1978, *Environmental testing – Test Q: Sealing.*

IEC 68-2-20: 1979, *Environmental testing – Test T: Soldering.*

IEC 68-2-27: 1987, *Environmental testing – Test Ea and guidance: Shock.*

IEC 68-2-29: 1987, *Environmental testing – Test Eb and guidance: Bump.*

IEC 68-2-30: 1980, *Environmental testing – Test Db and guidance: Damp heat, cyclic: (12 + 12 hour cycle).*

IEC 68-2-42: 1980, *Environmental testing – Test Kc: Sulphur dioxide test for contacts and connections.*

IEC 68-2-47: 1982, *Environmental testing – Mounting of components, equipment and other articles for dynamic* tests.

IEC 68-2-54: 1985, *Environmental testing – Test Ta: Solderability testing by the wetting balance method.*

IEC 457-1: 1974, *Rigid precision coaxial lines and their associated precision connectors. Part 1: General requirements and measuring methods.*

IEC 617: *Graphical symbols for diagrams.*

ISO 370: 1975, *Toleranced dimensions – Conversion from inches into millimetres and vice versa.*

ISO 1000: 1981, *SI units and recommendations for the use of their multiples and of certain other units.*