



# PRE-RELEASE VERSION (FDIS)

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**Radio-frequency connectors –  
Part 60: Sectional specification for RF coaxial connectors with push on mating –  
Characteristic impedance 50 Ohm (type SMPM)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## FINAL DRAFT INTERNATIONAL STANDARD (FDIS)

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TITLE:

**Radio-frequency connectors - Part 60: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 Ohm (type SMPM)**

PROPOSED STABILITY DATE: 2022

NOTE FROM TC/SC OFFICERS:

The project leader included this comment in his correspondence to me

Attached is the SMPM draft FDIS. He is asking the CO to update some of the figures per the comments listed in the draft.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –**

**Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)**

FOREWORD

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IEC 61169-60 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
46F/XX/FDIS	46F/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

A list of all parts of the IEC 61169 series, under the general title *Radio-frequency connectors*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

## RADIO-FREQUENCY CONNECTORS –

### Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)

#### 1 Scope

This part of IEC 61169, which is a sectional specification (SS), provides information and rules for the preparation of detail specifications (DS) for RF coaxial connectors with push-on coupling, typically for use in 50  $\Omega$  RF cables or micro-strips in microwave, telecommunication, wireless systems and other fields (SMPM).

It specifies mating face dimensions for general purpose connectors – grade 2, dimensional details of standard test connectors-grade 0, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to series SMPM RF connectors.

This specification indicates recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

The SMPM push-on coupling structure series RF coaxial connectors with the characteristic of normative impedance 50  $\Omega$  are used with various kinds of RF cables or micro-strips in microwave, telecommunication, wireless systems. The operating frequency limit is up to 65 GHz.

NOTE Imperial dimensions are original dimensions. All undimensioned pictorial configurations are for reference purpose only.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*