

# INTERNATIONAL STANDARD



**Connectors for electrical and electronic equipment – Product requirements –  
Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for  
data transmissions with frequencies up to 2 000 MHz**



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INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –  
PRODUCT REQUIREMENTS –****Part 3-104: Detail specification for 8-way, shielded free and fixed  
connectors for data transmissions with frequencies up to 2 000 MHz**

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International Standard IEC 61076-3-104 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This third edition of IEC 61076-3-104 cancels and replaces the second edition, published in 2006, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the title has been changed to incorporate transmissions with frequencies up to 2 000 MHz;
- b) the drawings of some styles have been corrected for clarification;
- c) Figures 23 and 24 have been updated;

- d) Figure 3 has been updated to include reference dimensions and dimensional format changes;
- e) the dimensions of Figure 7 have been updated;
- f) the type designation and ordering information has been removed for consistency with the most updated sectional specification;
- g) the test schedule was updated to include appropriate IEC 60512 Test Nos;
- h) the electrical performance requirements have been revised for 2 GHz level;
- i) interchangeability information has been added for performance categories.

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

FDIS	Report on voting
48B/2560/FDIS	48B/2565/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61076 series, published under the general title *Connectors for electronic equipment – Product requirements*, 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

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## INTRODUCTION

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## CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

### Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 2 000 MHz

#### 1 Scope

This part of IEC 61076 establishes uniform specifications, type testing requirements for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 2 000 MHz, and used as category 7<sub>A</sub> connectors in class F<sub>A</sub> cabling systems specified in ISO/IEC 11801-1. It contains all test methods and sequences, severity and preferred values for dimensions and characteristics.

#### 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 60050-581, *International Electrotechnical Vocabulary – Part 581: Electromechanical components for electronic equipment*

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

IEC 60169-15, *Radio-frequency connectors – Part 15: R.F. coaxial connectors with inner diameter of outer conductor 4.13 mm (0.163 in) with screw coupling – Character impedance 50 ohms (Type SMA)*

IEC 60352-2, *Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance*

IEC 60352-3, *Solderless connections – Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-4, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-5, *Solderless connections – Part 5: Press-in connections – General requirements, test methods and practical guidance*

IEC 60352-6, *Solderless connections – Part 6: Insulation piercing connections – General requirements, test methods and practical guidance*

IEC 60352-7, *Solderless connections – Part 7: Spring clamp connections – General requirements, test methods and practical guidance*

IEC 60512-1-1, *Connectors for electronic equipment – Tests and measurements – Part 1-1: General examination – Test 1a: Visual examination*