

INTERNATIONAL STANDARD

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Connectors for electronic equipment –

Part 3-103: Rectangular connectors – Detail specification for single row connectors with non-removable ribbon cable contacts on 1,25 mm pitch used for high speed serial data (HSSDC)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT –

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FOREWORD

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International Standard IEC 61076-3-103 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

FDIS	Report on voting
48B/1373/FDIS	48B/1402/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.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated when a new edition is prepared.

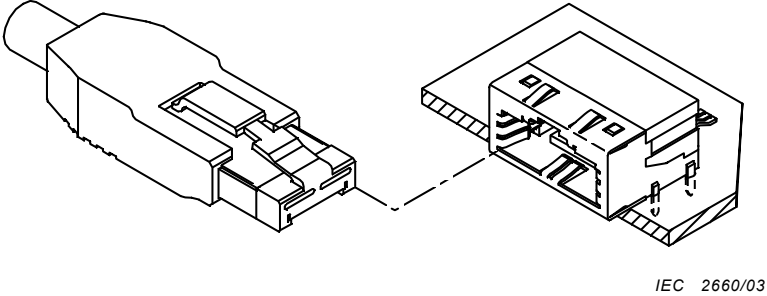
The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

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- withdrawn;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

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

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<p>Specification available from: IEC Central Office or from the address shown on the inside cover (electronic components of assessed quality)</p>	<p>IEC 61076-3-103</p>
<p>Electronic components of assessed quality DETAIL SPECIFICATION in accordance with IEC 61076-1:</p>	
<p>See 3.2, 3.3, 3.4 and 3.5 for dimensions</p>  <p style="text-align: right; font-size: small;">IEC 2660/03</p>	<p>Two part modular connectors for printed boards and backplanes. This standard is applicable to HSSDC type connectors</p> <p>The connector fixed board connector (receptacle) is suitable for mounting on printed boards and the free cable connector (plug) is suitable for permanent attachment to cable.</p> <p>Performance level(s): 1</p> <p>Assessment levels:</p> <p>Combination of performance levels and assessment levels:</p>
<p>Information on the availability of components qualified to this standard is given in the qualified products list.</p>	

1 General

1.1 Scope

This standard applies to a family of connectors having the following characteristics:

- shielded,
- rectangular-shaped mating interface,
- 1,25 mm pitch spacing of contacts on a single row,
- 8 positions,
- for wire-to-board applications.

All dimensions in this document apply to the unmated finished product after assembly to printed circuit boards or cables.

This standard establishes uniform specifications, testing requirements and quality assessment procedures. It is intended to be used in conjunction with sectional specification IEC 61076-3.

1.2 Recommended method of mounting

Fixed board connector is mounted on the printed circuit board with surface mount solder terminations having board lock or holding fixtures.

1.2.1 Number of contacts or contact cavities

There are 8 positions.

1.3 Ratings and characteristics

Rated voltage:	30 V DC
Current rating:	1 A per contact (positions 2 and 7 (first make – last break) contacts energized in parallel)
Insulation resistance:	100 M Ω minimum
Mechanical operation:	500 cycles
Contact resistance:	signal contacts 35 m Ω maximum initial shield contacts 42 m Ω maximum initial
Climatic category:	–55 °C to +100 °C
Characteristic impedance:	140 Ω – 160 Ω
Near end crosstalk:	30 dB maximum
Transfer impedance:	TBD
Printed board thickness:	1,60 mm \pm 0,15 mm
Contact spacing:	1,25 mm

1.4 Reference documents

IEC 60512 (all parts), *Connectors for electronic equipment – Tests and measurements*

IEC 60512-1-100:2001, *Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications*

IEC 61076-1:1995, *Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high speed data applications – Part 1: Generic specification*

IEC 61076-3:1999, *Connectors for use in d.c., low-frequency analogue and digital high-speed data applications – Part 3: Rectangular connectors with assessed quality – Sectional specification*

IEC 61076-3-001:1999, *Connectors for use in d.c., low-frequency analogue and digital high-speed data applications – Part 3-001: Rectangular connectors with assessed quality – Blank detail specification*

ISO 1302:2002, *Geometrical Product Specifications (GPS) – Indication of surface texture in technical product documentation*