

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Connectors for electronic equipment – Tests and measurements –  
Part 9-2: Endurance tests – Test 9b: Electrical load and temperature**

**Connecteurs pour équipements électroniques – Essais et mesures –  
Partie 9-2: Essais d'endurance – Essai 9b: Charge électrique et température**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –  
TESTS AND MEASUREMENTS –****Part 9-2: Endurance tests –  
Test 9b: Electrical load and temperature**

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International Standard IEC 60512-9-2 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces Test 9b of IEC 60512-5, issued in 1992. The structure of the test documents in the IEC 60512 series is explained in IEC 60512-1-100.

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

| FDIS          | Report on voting |
|---------------|------------------|
| 48B/2243/FDIS | 48B/2255/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.

A list of all parts of IEC 60512 series, under the general title *Connectors for electronic equipment – Tests and measurements*, can be found on the IEC website.

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

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- withdrawn,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

## CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

### Part 9-2: Endurance tests – Test 9b: Electrical load and temperature

#### 1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing connectors within the scope of technical committee 48. It may also be used for similar devices when specified in a detail specification.

The object of this standard is to detail a standard test method to assess the ability of a connector to withstand elevated temperatures with electrical loading.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

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

IEC 60512-2-1, *Connectors for electronic equipment – Tests and measurements – Part 2-1: Electrical continuity and contact resistance tests – Test 2a: Contact resistance – Millivolt level method*

IEC 60512-2-6, *Connectors for electronic equipment – Tests and measurements – Part 2-6: Electrical continuity and contact resistance tests – Test 2f: Housing (shell) electrical continuity*

IEC 60512-3-1, *Connectors for electronic equipment – Tests and measurements – Part 3-1: Insulation tests – Test 3a: Insulation resistance*

IEC 60512-4-1, *Connectors for electronic equipment – Tests and measurements – Part 4-1: Voltage stress tests – Test 4a: Voltage proof*

#### 3 Preparation

##### 3.1 Preparation of the specimen

The specimen shall be suitably fitted with temperature-sensing device(s) with dimensions as laid down in the detail specification, and be wired and mounted according to the detail specification.

NOTE 1 Heat transfer by a measuring probe will influence the measurement. Care should be taken to limit this influence, e.g. by using a non-intrusive measuring method.