

# INTERNATIONAL STANDARD

**IEC**  
**60539-2**

First edition  
2003-11

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**Directly heated negative temperature  
coefficient thermistors –**

**Part 2:  
Sectional specification –  
Surface mount negative temperature  
coefficient thermistors**



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## Directly heated negative temperature coefficient thermistors –

### Part 2: Sectional specification – Surface mount negative temperature coefficient thermistors

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**DIRECTLY HEATED NEGATIVE TEMPERATURE  
COEFFICIENT THERMISTORS –**
**Part 2: Sectional specification –  
Surface mount negative temperature coefficient thermistors**

## FOREWORD

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International Standard IEC 60539-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

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

FDIS	Report on voting
40/1346/FDIS	40/1368/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.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

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- withdrawn;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

A bilingual edition of this document may be issued at a later date.

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## DIRECTLY HEATED NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS –

### Part 2: Sectional specification – Surface mount negative temperature coefficient thermistors

#### 1 General

##### 1.1 Scope

This part of IEC 60539 is applicable to surface mount directly heated negative temperature coefficient thermistors, typically made from transition metal oxide materials with semiconducting properties. These thermistors have metallized connecting pads or soldering strips and are intended to be mounted directly on to substrates for hybrid circuits or on to printed boards.

##### 1.2 Normative references

The following referenced documents are indispensable for the application 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 60068-2-2:1974, *Environmental testing – Part 2: Tests – Tests B: Dry heat*  
Amendment 1 (1993)  
Amendment 2 (1994)

IEC 60068-2-14:1984, *Environmental testing – Part 2: Tests – Test N: Change of temperature*  
Amendment 1 (1986)

IEC 60068-2-30:1980, *Environmental testing – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)*  
Amendment 1 (1985)

IEC 60068-2-58:1999, *Environmental testing – Part 2-58: Tests – Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)*

IEC 60068-2-78: *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 60410:1973, *Sampling plans and procedures for inspection by attributes*

IEC 60539-1:2002, *Directly heated negative temperature coefficient thermistors – Part 1: Generic specification*

##### 1.3 Information to be given in a detail specification

Detail specifications shall be derived from the relevant blank detail specification.

Detail specifications shall not specify requirements inferior to those of the generic, sectional or blank detail specification. When more severe requirements are included, they shall be listed in 1.9 of the detail specification and indicated in the test schedules, for example, by an asterisk.