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Standards

Irish Standard
I.S. EN IEC 60539-2:2019

Directly heated negative temperature coefficient thermistors - Part 2: Sectional specification - Surface mount negative temperature coefficient thermistors

I.S. EN IEC 60539-2:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 60539-2:2019 is the adopted Irish version of the European Document EN IEC 60539-2:2019,
Directly heated negative temperature coefficient thermistors - Part 2: Sectional specification -
Surface mount negative temperature coefficient thermistors

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EUROPEAN STANDARD

EN IEC 60539-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2019

ICS 31.040.30

Supersedes EN 60539-2:2004 and all of its amendments
and corrigenda (if any)

English Version

**Directly heated negative temperature coefficient thermistors -
Part 2: Sectional specification - Surface mount negative
temperature coefficient thermistors
(IEC 60539-2:2019)**

Thermistances à coefficient de température négatif à
chauffage direct - Partie 2: Spécification intermédiaire -
Thermistances à coefficient de température négatif pour
montage en surface
(IEC 60539-2:2019)

Direkt geheizte temperaturabhängige Widerstände mit
negativem Temperaturkoeffizienten - Teil 2:
Rahmenspezifikation - Oberflächenmontierbare
temperaturabhängige Widerstände mit negativem
Temperaturkoeffizienten
(IEC 60539-2:2019)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60539-2:2019 (E)

European foreword

The text of document 40/2672/FDIS, future edition 2 of IEC 60539-2, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60539-2:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-05-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-08-23

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Annex ZA

(normative)

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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.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-14	2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	2009
IEC 60068-2-58	2015	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)	EN 60068-2-58	2015
+ A1	2017		+ A1	2018
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60539-1	2016	Directly heated negative temperature coefficient thermistors - Part 1: Generic specification	EN 60539-1	2016
IEC 61193-2	2007	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	2007

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Edition 2.0 2019-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

**Thermistances à coefficient de température négatif à chauffage direct –
Partie 2: Spécification intermédiaire – Thermistances à coefficient de
température négatif pour montage en surface**



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IEC 60539-2

Edition 2.0 2019-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

**Thermistances à coefficient de température négatif à chauffage direct –
Partie 2: Spécification intermédiaire – Thermistances à coefficient de
température négatif pour montage en surface**

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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.

This second edition cancels and replaces the first edition published in 2003 and Amendment 1:2010. This edition constitutes a technical revision.

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

- a) revision for the structure in accordance with ISO/IEC Directives, Part 2:2016 (seventh edition) to the extent practicable, and for harmonizing with IEC 60539-1:2016;
- b) the upper category temperatures of 175 °C, 200 °C, 250 °C, 315 °C, 400 °C in Table 1 have been added;
- c) the dimensions of 0402M in Annex A have been added.

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

FDIS	Report on voting
40/2672/FDIS	40/2680/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 in the IEC 60539 series, published under the general title *Directly heated negative temperature coefficient thermistors*, can be found on the IEC website.

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DIRECTLY HEATED NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS –

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

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.

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 60068-2-2:2007, *Environmental testing – Part 2-2: Tests – Tests B: Dry heat*

IEC 60068-2-14:2009, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

IEC 60068-2-58:2015, *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 60068-2-58:2015/AMD1:2017

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

IEC 60539-1:2016, *Directly heated negative temperature coefficient thermistors – Part 1: Generic specification*

IEC 61193-2:2007, *Quality assessment systems – Part 2: Selection and use of sampling plans for inspection of electronic components and packages*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60539-1 apply.

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