

INTERNATIONAL STANDARD

IEC
60738-1-2

QC 440002

First edition
1998-12

**Thermistors –
Directly heated positive step-function
temperature coefficient –**

**Part 1-2:
Blank detail specification –
Heating element application – Assessment level EZ**

*Thermistances à basculement à coefficient de température
positif à chauffage direct –*

*Partie 1-2:
Spécification particulière cadre –
Application aux éléments chauffants –
Niveau d'assurance EZ*



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For general terminology, readers are referred to IEC 60050: *International Electrotechnical Vocabulary (IEV)*.

For graphical symbols, and letter symbols and signs approved by the IEC for general use, readers are referred to publications IEC 60027: *Letter symbols to be used in electrical technology*, IEC 60417: *Graphical symbols for use on equipment. Index, survey and compilation of the single sheets* and IEC 60617: *Graphical symbols for diagrams*.

* See web site address on title page.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

THERMISTORS –

**DIRECTLY HEATED POSITIVE STEP-FUNCTION
TEMPERATURE COEFFICIENT –**

Part 1-2: Blank detail specification –

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FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 60738-1-2 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
40/1082/FDIS	40/1098/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.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

THERMISTORS –
DIRECTLY HEATED POSITIVE STEP-FUNCTION
TEMPERATURE COEFFICIENT –
Part 1-2: Blank detail specification –
Heating element application – Assessment level EZ

Introduction**Blank detail specification**

A blank detail specification is a supplementary document to the generic specification and contains requirements for style and layout and minimum content of detail specifications. Detail specifications not complying with these requirements shall not be considered as being in accordance with IEC specifications nor shall they so be described.

In the preparation of detail specifications the content of 1.4 of the generic specification shall be taken into account.

The numbers between brackets on the first page correspond to the following information which shall be inserted in the position indicated.

Identification of the detail specification

- [1] The "International Electrotechnical Commission" or the National Standards Organization under whose authority the detail specification is drafted.
- [2] The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- [3] The number and issue number of the IEC or national generic specification.
- [4] The IEC number of the blank detail specification.

Identification of the thermistor

- [5] A short description of the type of thermistor.
- [6] Information on typical construction (if applicable).

NOTE – When the thermistor is not designed for use on printed boards, this should clearly be stated in the detail specification in this position.

- [7] Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an annex to the detail specification.
- [8] Application or group of applications covered and/or assessment level.
- [9] Reference data on the most important properties, to allow comparison between the various thermistor types.

[1]	IEC 60738-1-2-XXX QC 440002	[2]
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH:	IEC 60738-1-2 QC 440002	[4]
[3]	DIRECTLY HEATED POSITIVE STEP-FUNCTION TEMPERATURE COEFFICIENT THERMISTORS FOR HEATING ELEMENT APPLICATION	[5]
Outline drawing: [see 1.2] [... angle projection]	MODIFIED FERRO-ELECTRIC CERAMIC MATERIAL	[6]
[7] [Other shapes are permitted within the dimensions given]	Assessment level: EZ	[8]

Information on the availability of components qualified to this detail specification is given in the Register of Approvals. [9]

1 General data

1.1 Method(s) of mounting (to be inserted)

(See 4.12.1 of IEC 60738-1.)

1.2 Dimensions

(All dimensions are in millimetres or inches and millimetres; it shall be stated which dimensions are suitable for gauging.)

Dimensioned drawing(s) shall be given in the detail specification. If necessary, the dimensions may be listed in tabular form with reference to styles or codes.

1.3 Coating

The detail specification shall state:

- a) whether the coating is insulating or non-insulating;
- b) the material;
- c) the colour, if applicable.

1.4 Terminations

The detail specification shall state whether the terminations are suitable for soldering. If they are not, suitable methods of connection shall be stated for example: welding, clamping or crimping.