NTC Thermistors, Long Insulated Leads 150 °C With Very Low Thermal Gradient



LINKS TO ADDITIONAL RESOURCES

Design Tools | Related Documents | 3D Models

QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	10K	Ω
Tolerance on R_{25}-value	± 2.19	%
Temperature accuracy between 25 °C and 85 °C -55 °C and 150 °C	± 0.5 ± 1.0	°C
$B_{25/85}$-value	3984	K
Tolerance on $B_{25/85}$-value	± 0.5	%
Operating temperature range at zero dissipation	-55 to +150	°C
Resistance value at 85 °C	1066.1	Ω
Maximum power dissipation at 55 °C	50	mW
Min. dielectric withstanding voltage (RMS) between leads and coating	100	V
Dissipation factor δ in still air (for information only)	0.8	mW/K
Response time (in oil)	0.3	s
Weight	≈ 0.05	g

DESIGN-IN SUPPORT

Not intended for fluid immersed applications or continuous contact with water or conducting liquids. Can be potted in suitable resins. For complete curve computation, please visit: www.vishay.com/thermistors/ntc-curve-list/. Consult Vishay for specific applications, mounting, alternative RT curves, or wire length.

FEATURES

- Long and flexible leads for special mounting or assembly requirements
- Best accuracy of ± 0.5 °C between 25 °C and 85 °C and ± 1.0 °C between -55 °C and 150 °C
- Electrical features of “accuracy line” sensors
- Mounting: radial insulated leads, low heat-conducting FeNi wires
- AEC-Q200 qualified
- Fast response time of 0.3 s with small 1.6 mm head Ø
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

e4

RoHS COMPLIANT

APPLICATIONS

Temperature measurement, sensing and control in automotive and industrial applications as e.g. battery cells and packs.

DESCRIPTION

These negative temperature coefficient thermistors consist of a mini-chip soldered between two AWG #32 PEEK insulated silver plated nickel / iron leads and coated with ocher colored epoxy lacquer. High adhesive strength between PEEK wire and encapsulating lacquer.

PACKAGING

The thermistors are packed in cardboard boxes; the smallest packing quantity is 1000 units.

MARKING

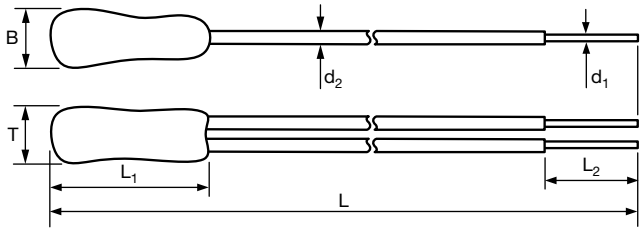
The component is not marked.

MOUNTING

Important mounting and handling instructions: see www.vishay.com/doc?29222

By soldering or crimping the wire end in any position. The body can be inserted in a tube, free in air, tape attached or glued.

DIMENSIONS in millimeters



T	B	L	L_1	L_2	Ø $d_{2\ MAX.}$	Ø d_1
1.6 max.	1.6 max.	75 ± 3	6 ± 1	5 ± 2	0.4	0.2 ± 0.02

ELECTRICAL DATA AND ORDERING INFORMATION

R_{25} (Ω)	T-TOL. (± °C)	$B_{25/85}$ (K)	$B_{25/85}$-TOL. (± %)	SAP MATERIAL AND ORDERING NUMBER RoHS COMPLIANT
10 000	0.5	3984	0.5	NTCLE317E4103SBA

For technical questions, contact: nlr@vishay.com

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