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Vishay BCcomponents

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



#### **LINKS TO ADDITIONAL RESOURCES**







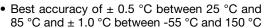
QUICK REFERENCE DATA						
PARAMETER	VALUE	UNIT				
Resistance value at 25 °C	10K	Ω				
Tolerance on R <sub>25</sub> -value	± 2.19	%				
Temperature accuracy between 25 °C and 85 °C -55 °C and 150 °C	± 0.5 ± 1.0	°C				
B <sub>25/85</sub> -value	3984	K				
Tolerance on B <sub>25/85</sub> -value	± 0.5	%				
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 $\delta$ 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: <a href="www.vishay.com/thermistors/ntc-curve-list/">www.vishay.com/thermistors/ntc-curve-list/</a>. Consult Vishay for specific applications, mounting, alternative RT curves, or wire length.

#### **FEATURES**

 Long and flexible leads for special mounting or assembly requirements



- Electrical features of "accuracy line" sensors
- Mounting: radial insulated leads, low heat-conducting FeNi wires



COMPLIANT

- 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 <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>

### **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.

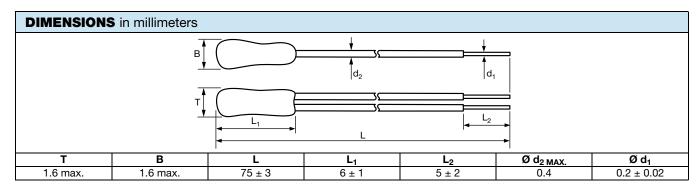
## **MARKING**

The component is not marked.

#### MOUNTING

Important mounting and handling instructions: see <a href="https://www.vishay.com/doc?29222">www.vishay.com/doc?29222</a>

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.



ELECTRICAL DATA AND ORDERING INFORMATION				
R <sub>25</sub>	T-TOL.	<i>T</i> -TOL. B <sub>25/85</sub> B <sub>25/85</sub> -TOL.	SAP MATERIAL AND ORDERING NUMBER	
<b>(Ω)</b>	(± °C)	(K)	(± %)	RoHS COMPLIANT
10 000	0.5	3984	0.5	NTCLE317E4103SBA



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