

## 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	$\Omega$
Tolerance on $R_{25}$ -value	$\pm 2.19$	%
Temperature accuracy between 25 °C and 85 °C	$\pm 0.5$	°C
-55 °C and 150 °C	$\pm 1.0$	
$B_{25/85}$ -value	3984	K
Tolerance on $B_{25/85}$ -value	$\pm 0.5$	%
Operating temperature range at zero dissipation	-55 to +150	°C
Resistance value at 85 °C	1066.1	$\Omega$
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	$\approx 0.05$	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/](http://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  $\pm 0.5$  °C between 25 °C and 85 °C and  $\pm 1.0$  °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  $\varnothing$
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**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 other 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.

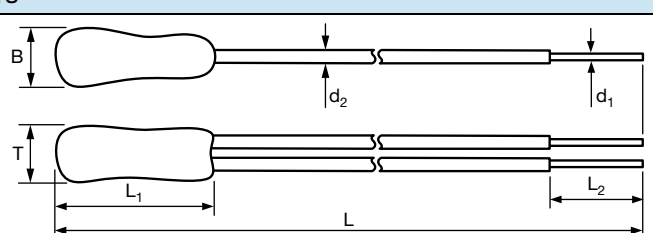
### MARKING

The component is not marked.

### MOUNTING

Important mounting and handling instructions: see [www.vishay.com/doc?29222](http://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 <sub>1</sub>	L <sub>2</sub>	$\varnothing d_2$ MAX.	$\varnothing d_1$
1.6 max.	1.6 max.	75 $\pm$ 3	6 $\pm$ 1	5 $\pm$ 2	0.4	0.2 $\pm$ 0.02

ELECTRICAL DATA AND ORDERING INFORMATION				
$R_{25}$ ( $\Omega$ )	T-TOL. ( $\pm$ °C)	$B_{25/85}$ (K)	$B_{25/85}$ -TOL. ( $\pm$ %)	SAP MATERIAL AND ORDERING NUMBER
10 000	0.5	3984	0.5	RoHS COMPLIANT
				NTCLE317E4103SBA



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