Vishay BCcomponents

NTCLE317E4103SBA

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



www.vishay.com

LINKS TO ADDITIONAL RESOURCES

Design Tools



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: <u>www.vishay.com/thermistors/ntc-curve-list/</u>. 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 RoHS
 heat-conducting FeNi wires
 COMPLIANT
- AEC-Q200 qualified
- Fast response time of 0.3 s with small 1.6 mm head $\ensuremath{\varnothing}$
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

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.



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

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