NTC Thermistors, Radial Leaded Special Accuracy



FEATURES

- Excellent accuracy between 25 °C and 85 °C
- High stability over a long life
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

APPLICATIONS

- Temperature measurement, sensing, and control

LINKS TO ADDITIONAL RESOURCES

Related Documents

DESCRIPTION

These thermistors have a NTC chip soldered between two tin-plated copper leads. It has a gray lacquered body but is not insulated. These thermistors have an accuracy of ± 0.5 °C over a trajectory from 25 °C to 85 °C.

PACKAGING

The thermistors are packed in cardboard boxes, each box contains 500 units.

MARKING

Grey lacquered body.

MOUNTING

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

By soldering in any position. Not intended for potted applications.

DESIGN-IN SUPPORT

For complete curve computation, please visit: www.vishay.com/thermistors/ntc-curve-list/.

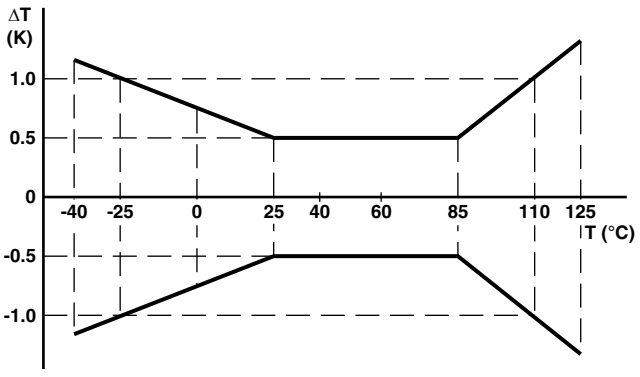
QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	4.7K to 100K	Ω
Tolerance on R_{25}-value	± 2.19 to ± 2.29	%
$B_{25/85}$-value	3977 to 4190	K
Tolerance on $B_{25/85}$-value	± 0.75; ± 1.5	%
Operating temperature range at zero dissipation	-40 to +125	°C
Accuracy for T measured between 25 °C and 85 °C	± 0.5	°C
Maximum power dissipation at 55 °C	250	mW
Dissipation factor δ (for information only)	7	mW/K
Response time (for information only) (1)	1.2	s
Thermal time constant τ (for information only)	11	s
Weight	≈ 0.22	g

Note

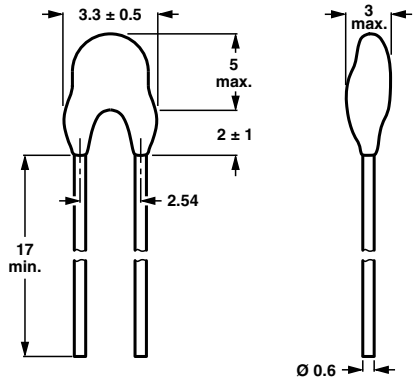
(1) Response time in silicone oil MS 200/50. This is the time needed for the sensor to reach 63.2 % of the total temperature difference when subjected to a temperature change from 25 °C in air to 85 °C in oil

ELECTRICAL DATA AND ORDERING INFORMATION					
R_{25} (Ω)	R_{25}-TOL. (± %)	$B_{25/85}$ (K)	$B_{25/85}$-TOL. (± %)	DESCRIPTION	SAP MATERIAL AND ORDERING NUMBER
4700	2.19	3977	0.75	NTC copper 0.6 lead 4.7K special tol. bulk e3	NTCLE101E3472SB0
10 000	2.19	3977	0.75	NTC copper 0.6 lead 10K special tol. bulk e3	NTCLE101E3103SB0
47 000	2.23	4090	1.5	NTC copper 0.6 lead 47K special tol. bulk e3	NTCLE101E3473SB0
100 000	2.29	4190	1.5	NTC copper 0.6 lead 100K special tol. bulk e3	NTCLE101E3104SB0

TEMPERATURE ACCURACY GRAPH



DIMENSIONS in millimeters



For technical questions, contact: nlr@vishay.com

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