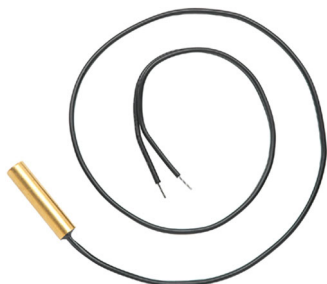


NTC Thermistors, Special Long Lead Sensors


RoHS
COMPLIANT

FEATURES

- Accurate over wide temperature range
- High stability
- Excellent price / performance ratio
- High adhesive strength between PVC wire and the encapsulating lacquer
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

Temperature measurement, sensing and control in remote locations and for various environmental conditions.

DESCRIPTION

These sensors exist of a small NTC chip reflow soldered between two AWG24 UL-2651 105 °C rating 300 V wires. They are lacquered and insulated and potted into a brass pipe. The RoHS-compliant version is using lead (Pb)-free brass material.

MARKING

UL mark on wire, no mark on body.

PACKAGING

The thermistors are packed in cardboard boxes; each box containing 500 pieces.

DESIGN-IN SUPPORT

- For complete curve computation, please visit: www.vishay.com/en/thermistors/ntc-rt-calculator/
- Other wire length and wire type are available on request. The products can be provided with a connector on request with a minimum buy constraint

MOUNTING

By soldering or clamping the wire ends, in any position. Body can be inserted or taped attached. Not intended for fluid immersed applications.

LINKS TO ADDITIONAL RESOURCES



QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	10K	Ω
Tolerance on R_{25} -value	± 3	%
$B_{25/85}$ -value	3984	K
Tolerance on $B_{25/85}$ -value	± 0.5	%
Dissipation factor:	6.0	mW/K
Response time ⁽¹⁾ :	≈ 10	s
Operating temperature range: At zero dissipation (continuously)	-40 to +105	°C
Min. dielectric withstanding voltage between terminals and sensor body	1500	V _{AC}
Weight	25	g

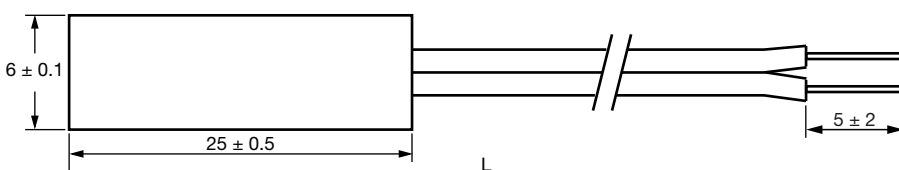
Note

- ⁽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. (± %)	LEAD LENGTH (mm)	SAP MATERIAL AND ORDERING NUMBER	
					RoHS COMPLIANT WITH EXEMPTION ⁽¹⁾⁽²⁾	RoHS-COMPLIANT
10 000	3	3984	0.5	1500 ± 20	NTCAPIPE3C90105	NTCAPIPE3C90105A

Notes

- Preferred versions for new designs
- Preferred types are marked in **bold**
- ⁽¹⁾ RoHS exemption 7(c)-I: electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezo-electronic devices, or in a glass or ceramic matrix compound
- ⁽²⁾ RoHS exemption 6(c): Copper alloy containing up to 4 % lead in weight

DIMENSIONS in millimeters	
Brass-pipe type	

Note

- L: refer to table



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