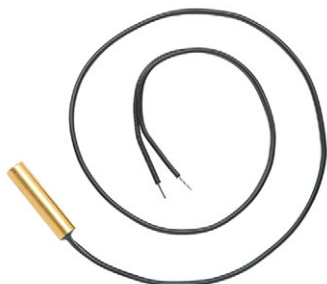


## NTC Thermistors, Special Long Lead Sensors



### 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 <sup>(1)</sup> :	≈ 10	s
Operating temperature range: At zero dissipation (continuously)	-40 to +105	°C
Min. dielectric withstanding voltage between terminals and sensor body	1500	V <sub>AC</sub>
Weight	25	g

#### Note

- <sup>(1)</sup> 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

### 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](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

### 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/](http://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.

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 <sup>(1)</sup>	RoHS-COMPLIANT
10 000	3	3984	0.5	1500 ± 20	NTCAPIPE3C90105	NTCAPIPE3C90105A

#### Notes

- Preferred versions for new designs
- <sup>(1)</sup> 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

DIMENSIONS in millimeters	
Brass-pipe type	

#### Note

- L: refer to table



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