

NTC Thermistors, Long Insulated Leads



LINKS TO ADDITIONAL RESOURCES



3D Models



Design Tools



Related Documents

| QUICK REFERENCE DATA | | |
|---|-------------|------|
| PARAMETER | VALUE | UNIT |
| Resistance value at 25 °C | 2765 | Ω |
| Tolerance on R_{25} -value | ± 2.93 | % |
| $B_{25/85}$ -value | 3977 | K |
| Tolerance on $B_{25/85}$ -value | ± 0.75 | % |
| Operating temperature range at zero dissipation | -40 to +125 | °C |
| Resistance value at 0 °C | 9000 | Ω |
| Tolerance on R_0 -value | ± 2.0 | % |
| Maximum power dissipation at 55 °C | 100 | mW |
| Minimum dielectric withstanding voltage (RMS) between leads and coating | 500 | V |
| Dissipation factor δ (for information only) | 1.35 | mW/K |
| Response time | 1.25 | s |
| Weight | ≈ 0.16 | g |

DESIGN-IN SUPPORT

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

FEATURES

- Long and flexible leads for special mounting or assembly requirements
- Best accuracy of ± 0.4 °C at 0 °C
- Electrical features of “accuracy line” sensors
- Mounting: radial insulated leads
- AEC-Q200 qualified
- Small head diameter with fast response time of 1.2 s
- Material categorization: for definitions of compliance please see 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 #30 PEEK insulated silver plated nickel leads and coated with ochre 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.

Not intended for fluid immersed applications or continuous contact with water or conducting liquids. Can be potted in suitable resins. Consult Vishay for specific applications, mounting, alternative RT curves, or wire length.

| DIMENSIONS in millimeters | | | | | | |
|---------------------------|------------|----------|----------------------|----------------------|-----------------------------|------------------------|
| | | | | | | |
| T | B | L | L₁ | L₂ | ∅ d₂ MAX. | ∅ d₁ |
| 2.0 to 2.5 | 2.0 to 2.5 | 110 ± 3 | 6 ± 1 | 5 ± 2 | 0.58 | 0.25 ± 0.025 |

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | SAP MATERIAL AND ORDERING NUMBER | |
|--|-------------------------|--------------------|----------------------------|-----------------------------------|-------------------|
| R_{25} (Ω) | R_{25} -TOL. (± %) | $B_{25/85}$ (K) | $B_{25/85}$ -TOL. (± %) | RoHS COMPLIANT WITH EXEMPTION (1) | RoHS COMPLIANT |
| 2765 | 2.93 | 3977 | 0.75 | NTCLE301E4C90059 | NTCLE301E4C90059A |

Notes

- Preferred versions for new designs
- (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



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