NTC Thermistors, Standard Lug Sensors, 150 °C

FEATURES

- **150 °C long term stability** (5000 h dry heat)
- Easy mounting using ring tongue terminal
- Rugged construction
- Cable with ETFE insulation according to NEMA HP-3, type Z, rated 600 V_{RMS}, cable test voltage **3.4 kV**
- AEC-Q200 qualified (grade 1)
- UL recognized, file E148885 (UL category XGPU2)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

RoHS COMPLIANT

DESIGN SUPPORT TOOLS

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3D Models Available

Design Tools Available

- NTC curve computation: www.vishay.com/thermistors/ntc-curve-list/

APPLICATIONS

- Suitable for surface sensing applications, especially when a good electrical insulation and a good thermal contact with the chassis is required for:
  - Automotive equipment
  - EV and battery management
  - Power electronics, heat sink
  - Consumer appliances

QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Resistance value at 25 °C (1)	10K	Ω
Tolerance on R_{25}-value (1)	± 1 to ± 2	%
$B_{25/85}$-value (1)	3435, 3984	K
Tolerance on $B_{25/85}$-value	± 0.5 to ± 1	%
Operating temperature range at zero dissipation	-40 to +150	°C
Min. dielectric withstanding voltage between terminals and lug	2700	V_{AC}
Min. insulation resistance between terminals and lug at 500 V_{DC}	100	MΩ
Weight	2.0 to 3.2	g

Note

(1) Other R_{25}-values, $B_{25/85}$-values, and tolerances are available upon request

DESCRIPTION

A NTC thermistor chip is soldered to AWG#26 multi-stranded silver plated copper leads with ETFE insulation and insulated with epoxy coating. The insulated sensor is attached to a tin plated copper ring lug via a middle buffer layer. The lead wires are twisted.

MOUNTING

- By means of M3 (Stud #3, #4) or M3,5 (Stud #5, #6) screw. Leads to be soldered or crimped
- The device is suitable for screwing e.g. on metal surface
- The leads are suitable for soldering e.g. on PCB
- Consult Vishay for other cable length, cable section, screw sizes, insulation, connector crimping or other features

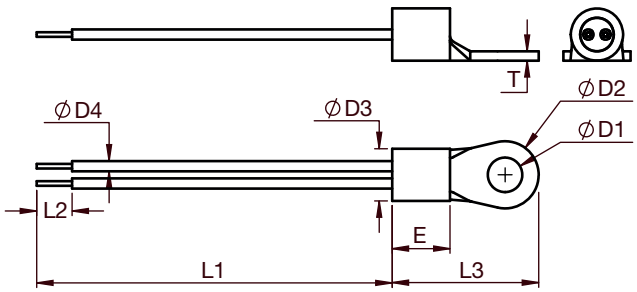
ELECTRICAL DATA AND ORDERING INFORMATION

R_{25} (Ω)	R_{25}-TOL. (± %)	$B_{25/85}$ (K)	$B_{25/85}$-TOL. (± %)	L_1 (mm)	DESCRIPTION	SAP MATERIAL AND ORDERING NUMBER	
						with RoHS exemption (1)	without RoHS exemption (1)
10 000	1	3984	0.5	150 ±10	NTC Lug01T 10K 1 % 3984 K 150 °C ETFE AWG26 150 mm	NTCALUG01T103F	NTCALUG01T103FA
10 000	1	3435	1.0	150 ±10	NTC Lug01T 10K 1 % 3435 K 150 °C ETFE AWG26 150 mm	NTCALUG01T103FL	NTCALUG01T103FLA
10 000	2	3984	0.5	150 ±10	NTC Lug01T 10K 2 % 3984 K 150 °C ETFE AWG26 150 mm	NTCALUG01T103G	NTCALUG01T103GA
10 000	2	3984	0.5	200 ±10	NTC Lug01T 10K 2 % 3984 K 150 °C ETFE AWG26 200 mm	NTCALUG01T103G201	NTCALUG01T103G201A
10 000	2	3984	0.5	500 ±10	NTC Lug01T 10K 2 % 3984 K 150 °C ETFE AWG26 500 mm	NTCALUG01T103G501	NTCALUG01T103G501A

Note

(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

DIMENSIONS in millimeters



L_1	L_2	Ø D_1	Ø D_2	Ø D_3	T	L_3	E	D_4
Refer to the ordering table	3.8 ± 1	3.7 +0.2 / -0	7.2 ± 0.2	5.6 +0.3 / -0.2	1.0	15.70 ± 0.3	6.2 ± 0.2	0.93 ± 0.1

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