

## NTC Thermistors, Standard Lug Sensors, 150 °C



### DESIGN SUPPORT TOOLS AVAILABLE



- NTC curve computation:

[www.vishay.com/thermistors/ntc-curve-list/](http://www.vishay.com/thermistors/ntc-curve-list/)

QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C <sup>(1)</sup>	10K	Ω
Tolerance on $R_{25}$ -value <sup>(1)</sup>	± 1 to ± 2	%
$B_{25/85}$ -value <sup>(1)</sup>	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 <sub>AC</sub>
Min. insulation resistance between terminals and lug at 500 V <sub>DC</sub>	100	MΩ
Weight	2.0 to 3.2	g

#### Note

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

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 <sup>(1)</sup>	without RoHS exemption <sup>(1)</sup>
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	40 ± 5	NTC Lug01T 10K 2 % 3984 K 150 °C ETFE AWG26 40 mm	NTCALUG01T103G400	NTCALUG01T103G400A
10 000	2	3984	0.5	150 ± 10	NTC Lug01T 10K 2 % 3984 K 150 °C ETFE AWG26 150 mm	<b>NTCALUG01T103G</b>	<b>NTCALUG01T103GA</b>
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

- <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

### 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<sub>RMS</sub>, 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](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

### APPLICATIONS

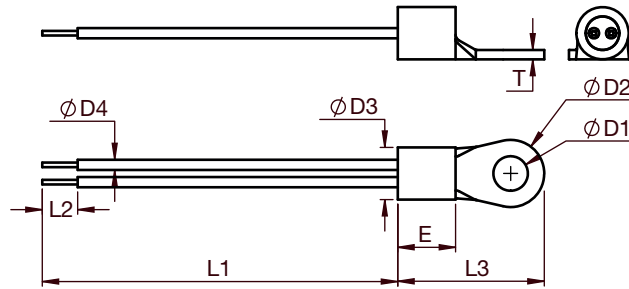
- Suitable for surface sensing applications, especially when a good electrical insulation and a good thermal contact with the chassis is required for:
  - Automotive equipment
  - EV and battery management
  - Power electronics, heat sink
  - Consumer appliances

### 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

**DIMENSIONS** in millimeters


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



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