

Vishay BCcomponents

NTC Thermistors, Standard Lug Sensors





LINKS TO ADDITIONAL RESOURCES









QUICK REFERENCE DATA						
PARAMETER	VALUE	UNIT				
Resistance value at 25 °C (1)	10K	Ω				
Tolerance on R ₂₅ -value ⁽¹⁾	± 2 to ± 3	%				
B _{25/85} -value ⁽¹⁾	3435 to 3984	K				
Tolerance on B _{25/85} -value	± 0.5 to ± 1	%				
Operating temperature range at:	°C					
Zero dissipation	-40 to +150	C				
Dissipation factor (2)	≈ 23	mW/K				
Thermal time constant (2)	≈ 7.5	s				
Min. dielectric withstanding voltage between terminals and lug	1500	V_{AC}				
Min. insulation resistance between terminals and lug at 500 V _{DC}	100	МΩ				
Climatic category (LCT / UCT / days)	40 / 150 / 56					
Weight	1.6 to 4.3	g				

Notes

- $^{(1)}$ Other R_{25} -values, B $_{25/85}$ -values, and tolerances are available upon request
- (2) Measured with screw mounted on an aluminum heatsink of 100 cm², thickness 1.5 mm, in still air at T_{amb} = 25 °C

AGENCY APPROVALS

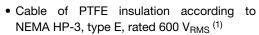
- cUL certificate XGPU8.E148885
- ULus certificate XGPU2.E148885

Note

 Agency approval documents, please see: <u>www.vishay.com/ppq?29193&documents</u>

FEATURES

- · Easy mounting using ring tongue terminal
- Rugged construction





- AEC-Q200 qualified (grade 1)
- cULus recognized, file E148885 (UL category XGPU2/XGPU8)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Note

(1) Formerly MIL-W-16878/4, type E, cable test voltage 3.4 kV

APPLICATIONS

Suitable for surface sensing applications, especially when a good electrical insulation and a good thermal contact with the chassis is required.

DESCRIPTION

A NTC thermistor chip is soldered to AWG#24 stranded silver plated copper leads with PTFE insulation and insulated with epoxy coating. The insulated sensor is attached to a tin plated copper ring lug. The lead wires are stripped.

PACKAGING

The thermistors are packed in cardboard boxes.

CAUTIONS AND WARNINGS ON MOUNTING AND HANDLING

Please read the special instructions:

see www.vishay.com/doc?29221

- By means of M4 (stud #8) 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

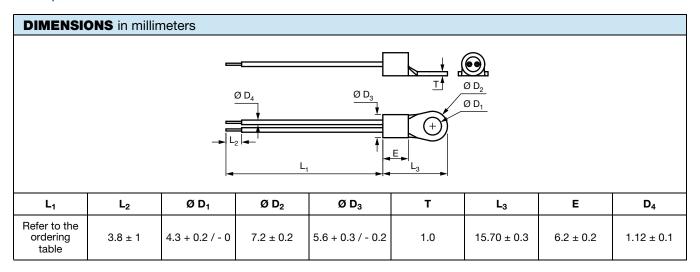
DESIGN-IN SUPPORT

- Other resistance curves and tolerances are available on request
- Consult Vishay for other lead length, other connector crimping, or other features
 - https://info.vishay.com/vishay-ntc-modification-request
- 3D solid models: www.vishay.com/doc?29198
- NTC curve computation: <u>www.vishay.com/thermistors/ntc-rt-calculator/</u>



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ELEC	ELECTRICAL DATA AND ORDERING INFORMATION									
R ₂₅ (Ω)	R ₂₅ - TOL. (± %)	B _{25/85} (K)	B _{25/85} -TOL. (± %)	L ₁ (mm)	DESCRIPTION	UL RECOG. c 71 0° US	SAP MATERIAL AND ORDERING NUMBER			
							RoHS-COMPLIANT WITH EXEMPTION (1)	RoHS-COMPLIANT		
10 000	2	3984	0.5	38.1 ± 3.8	NTC Lug91 M4 10K 2 % 3984 K PTFE AWG#24 38 mm	✓	NTCALUG91A103G	NTCALUG91A103GA		
10 000	2	3435	1	38.1 ± 3.8	NTC Lug91 M4 10K 2 % 3435 K PTFE AWG#24 38 mm	✓	NTCALUG91A103GL	NTCALUG91A103GLA		
10 000	2	3984	0.5	300 +10 / -5	NTC Lug91 M4 10K 2 % 3984 K PTFE AWG#24 300 mm	✓	NTCALUG91A103G301	NTCALUG91A103G301A		
10 000	3	3984	0.5	150 +10 / -5	NTC Lug91 M4 10K 3 % 3984 K PTFE AWG#24 150 mm	√	NTCALUG91A103H151	NTCALUG91A103H151A		

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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