



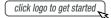
Vishay BCcomponents

NTC Thermistors, Standard Lug Sensors





DESIGN SUPPORT TOOLS







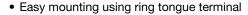
- SPICE models available: www.vishay.com/doc?29178
- NTC curve computation: <u>www.vishay.com/thermistors/ntc-curve-list/</u>

QUICK REFERENCE DATA							
PARAMETER	VALUE	UNIT					
Resistance value at 25 °C (1)	10K	Ω					
Tolerance on R ₂₅ -value ⁽¹⁾	± 2	%					
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						
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 $^{\circ}$ C

FEATURES





Rugged construction

 Cable of PTFE insulation according to NEMA HP-3, type E, rated 600 V_{RMS} (1)

ROHS

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

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.

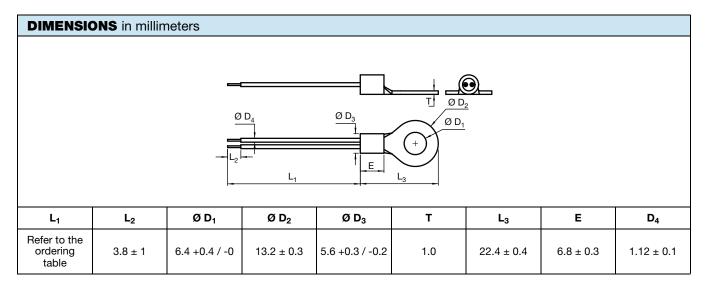
MOUNTING

- By means of M6 (Stud #1/4) 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



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ELECTRICAL DATA AND ORDERING INFORMATION										
R ₂₅ (Ω) (± %)	R ₂₅ -TOL.	B _{25/85} (K)	B _{25/85} -TOL. L ₁ (± %) (mm)	L ₁	DESCRIPTION	SAP MATERIAL AND ORDERING NUMBER		UL		
	(± %)			(mm)		WITH ROHS EXEMPTION (1)	WITHOUT RoHS EXEMPTION (1)	REC. (Y / N)		
10 000	2	3984	0.5	38.1 ± 3.8	NTC Lug85 M6 10K 2 % 3984 K PTFE AWG#24 38 mm	NTCALUG85A103G	NTCALUG85A103GA	Y		
10 000	2	3435	1	38.1 ± 3.8	NTC Lug85 M6 10K 2 % 3435 K PTFE AWG#24 38 mm	NTCALUG85A103GL	NTCALUG85A103GLA	Y		
10 000	2	3984	0.5	150 +10 / -5	NTC Lug85 M6 10K 2 % 3984 K PTFE AWG#24 150 mm	NTCALUG85A103G151	NTCALUG85A103G151A	Y		

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



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B57620C472K962 B57620C5103J062 B57621C5102J062 A1004SG22P0 192-103LPR-A01 199-303KAF-A02 30054-4 B57471V2474H062

B57620C5102J062 B57620C5223J062 500-52AA04-101 526-31AA19-104 526-31AN12-202 103AT-5-1P-FT 10K3A542I 111-802EAJ-901

112-103FAG-H02 112-104KAG-B01 11028414-00 111-182CAG-H01 112-103FAF-H01 112-104KBF-F01 118-202CAJ-P01 526-31AA79-102 B57442V5103J62 517-59CL01-202 B57401V2103H62 B57621C5472J62 11032565-00 44015RC 194303KEVA01

NTCACAPE3C90193 B57359V2224J260 B57343V5103J360 NXRT15WB473FA1B040 50070974-003-01 189-602LDR-A01

B57621C5472K062 135-105QAF-J02 B57421V2153J062 B57471V2684H062 B57471V2333H062 126-153YJC-B01