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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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www.vishay.com

Vishay BCcomponents

NTC Thermistors, Standard Lug Sensors





DESIGN SUPPORT TOOLS

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

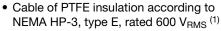
QUICK REFERENCE DATA							
PARAMETER	VALUE	UNIT					
Resistance value at 25 °C (1)	4.7K to 100K	Ω					
Tolerance on R ₂₅ -value ⁽¹⁾	± 1 to ± 5	%					
B _{25/85} -value ⁽¹⁾	3435 to 4190	K					
Tolerance on B _{25/85} -value	± 0.5 to ± 1.5	%					
Operating temperature range at:	°C						
Zero dissipation	-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	ΜΩ					
Climatic category (LCT / UCT / days)	40 / 150 / 56						
Weight	1.5 to 2.3	g					

Notes

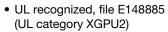
- Other R₂₅-values, B_{25/85}-values, and tolerances are available upon request
- ⁽²⁾ Measured with screw mounted on an aluminum heatsink of 100 cm^2 , thickness 1.5 mm, in still air at $T_{amb} = +25 \text{ }^{\circ}\text{C}$

FEATURES

- Easy mounting using ring tongue terminal
- Rugged construction







 Material categorization: for definitions of compliance please see www.vishav.com/doc?99912





ROHS COMPLIAN

Note

(1) Formerly MIL-W-16878/4, type E

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 copper leads with PTFE 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 and tinned.

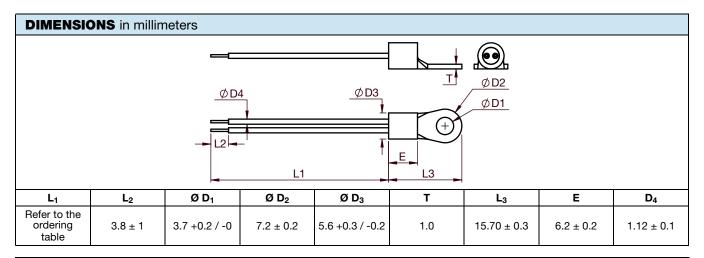
PACKAGING

The thermistors are packed in cardboard boxes; the smallest packaging quantity is 500 units.

MOUNTING

- By means of M3 (Stud 3-4) 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)	DESCRIPTION	SAP MATERIAL AND ORDERING NUMBER		UL		
						with RoHS exemption ⁽²⁾	without RoHS exemption ⁽²⁾	RECOGNIZED (Y / N)		
4700	3	3984	0.5	38.1 ± 3.8	NTC Lug01 4.7K 3 % 3984K PTFE AWG#24 38 mm	NTCALUG01A472H	NTCALUG01A472HA	N		
10 000	1	3435	1	38.1 ± 3.8	NTC Lug01 10K 1 % 3435K PTFE AWG#24 38 mm	NTCALUG01A103FL	NTCALUG01A103FLA	Υ		
10 000	1	3984	0.5	38.1 ± 3.8	NTC Lug01 10K 1 % 3984K PTFE AWG#24 38 mm	NTCALUG01A103F	NTCALUG01A103FA	Y		
10 000	1	3984	0.5	80 ± 5	NTC Lug01 10K 1 % 3984K PTFE AWG#24 80 mm	NTCALUG01A103F800	NTCALUG01A103F800A	Y		
10 000	1	3435	1	80 ± 5	NTC Lug01 10K 1 % 3435K PTFE AWG#24 80 mm	NTCALUG01A103F800L	NTCALUG01A103F804A	Y		
10 000	1	3984	0.5	160 +10 / -5	NTC Lug01 10K 1 % 3984K PTFE AWG#24 160 mm	NTCALUG01A103F161	NTCALUG01A103F161A	Y		
10 000	1	3435	1	160 +10 / -5	NTC Lug01 10K 1 % 3435K PTFE AWG#24 160 mm	NTCALUG01A103F161L	NTCALUG01A103F165A	Y		
10 000	2	3984	0.5	38.1 ± 3.8	NTC Lug01 10K 2 % 3984K PTFE AWG#24 38 mm	NTCALUG01A103G	NTCALUG01A103GA	Y		
10 000	3	3984	0.5	38.1 ± 3.8	NTC Lug01 10K 3 % 3984K PTFE AWG#24 38 mm	NTCALUG01A103H	NTCALUG01A103HA	Υ		
10 000	5	3984	0.5	38.1 ± 3.8	NTC Lug01 10K 5 % 3984K PTFE AWG#24 38 mm	NTCALUG01A103J (1)	NTCALUG01A103JA	Y		
47 000	3	4090	1.5	38.1 ± 3.8	NTC Lug01 47K 3 % 4090K PTFE AWG#24 38 mm	NTCALUG01A473H	NTCALUG01A473HA	N		
100 000	1	4190	1.5	38.1 ± 3.8	NTC Lug01 100K 1 % 4190K PTFE AWG#24 38 mm	NTCALUG01A104F	NTCALUG01A104FA	N		
100 000	2	4190	1.5	38.1 ± 3.8	NTC Lug01 100K 2 % 4190K PTFE AWG#24 38 mm	NTCALUG01A104G	NTCALUG01A104GA	N		

Notes

⁽¹⁾ NTCALUG01A103J identical to NTCALUGE2C90169 = 2381 645 90169

⁽²⁾ 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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Vishay

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