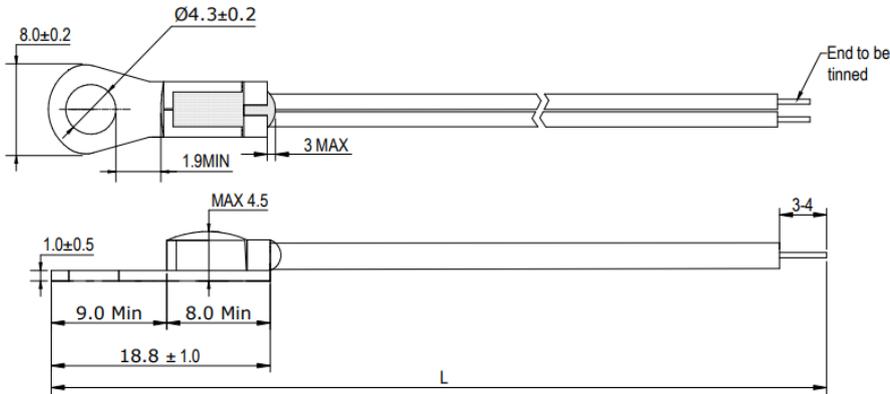


DESCRIPTION

NTC Thermistor assembled with 26/7/34 SPC AWG PTFE insulated white wire (UL1180). Thermistor encapsulated with an eyelet for surface temperature measurement.



SPECIFICATIONS

SL NO	PARAMETER	VALUE	UNIT
1	Resistance at 0°C	7.351±0.6%	KΩ
2	Resistance at 25°C	2.252±0.5%	KΩ
3	Resistance at 70°C	0.394±0.4%	KΩ
5	Beta Value (25/85)°C	3977	K
6	Beta Tolerance	±1	%
7	Insulation Resistance	100	MΩ
8	Isolation Strength	1500	Vac
9	Response Time	10	Sec
11	Storage Temperature	-40 to 85	°C
12	Operating temperature	-55 to +125	°C

FEATURES

- High Stability & reliability
- Rugged construction
- Flame Resistant and Retardant
- Fast response
- High measuring accuracy
- Easy to install
- Complaint to RoHS Directive 2015/863/EU.

APPLICATIONS

- Medical devices
- Testing measurement system
- Precise temperature measurement
- Heating / Cooling Devices
- Boiler System Appliances
- Surface temperature measurement

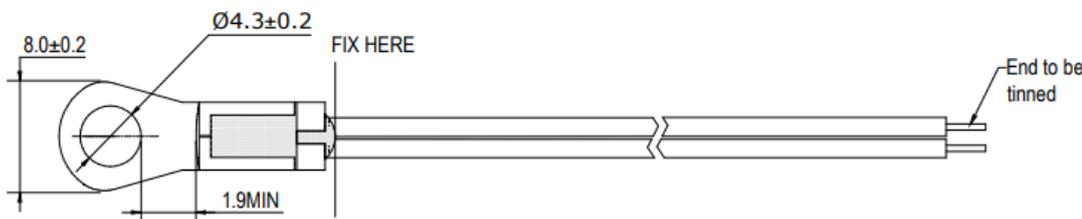
RELIABILITY SPECIFICATION

Description	Test Conditions	Characteristics Drift
Dry Heat Test	Elements are placed in a oven of temp. at $125^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than $\pm 3\%$. ΔB after test are less than $\pm 2\%$.
Cold Test	Elements are placed in an oil bath of temperature at $-30^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than $\pm 3\%$. ΔB after test are less than $\pm 2\%$.
Thermal Shock Test	-30°C Air Chamber, 3 minute) \rightarrow RT(Air, under 1min) \rightarrow 90°C Air Chamber, 3 minute) for 1000 cycle. After test the elements are stored in room temperature for one hour.	ΔR after test are less than $\pm 3\%$. ΔB after test are less than $\pm 2\%$.
Damp Heat Test	Elements are placed in a chamber of temp. at $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and 90~95%RH for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than $\pm 3\%$. ΔB after test are less than $\pm 2\%$.

Mechanical Test

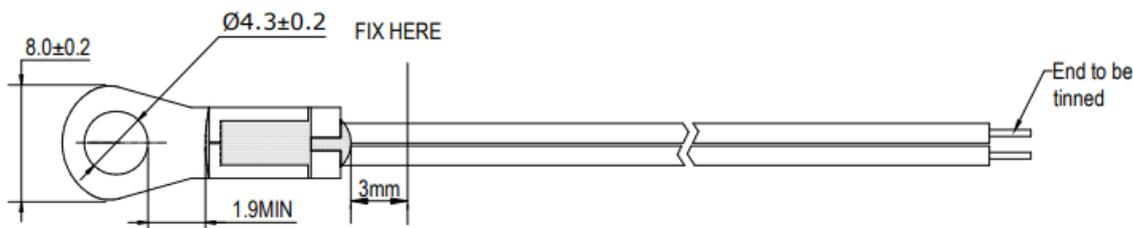
1. Terminal tensile strength test

Load tensile stress of 5N to axial direction slowly and keep it for 30 ± 5 sec. After the test characteristics, appearance and shape shall not change.



2. Terminal bending test

Lead wire will be fixed at 3mm from its probe end. Apply load of 5N to lead wire so that it makes 90 degree. Then put it back to original position. After two times of this action, characteristics, appearance of sensor shall not change.



PART NUMBER SYSTEM



RT CHART

T (°C)	R (kΩ)										
-40	75.052	-5	9.516	30	1.813	65	0.468	100	0.153	135	0.059
-35	54.241	0	7.344	35	1.469	70	0.394	105	0.132	140	0.053
-30	39.618	5	5.713	40	1.198	75	0.333	110	0.115	145	0.047
-25	29.233	10	4.478	45	0.982	80	0.283	115	0.100	150	0.041
-20	21.782	15	3.535	50	0.810	85	0.241	120	0.087		
-15	16.382	20	2.811	55	0.672	90	0.206	125	0.077		
-10	12.432	25	2.250	60	0.559	95	0.177	130	0.067		

SOLDERING

1. Soldering Temperature: 320°C Max.
2. Soldering Duration: 6.0 Second Max.
3. Preheat Temperature: 160°C for 3.0 Sec.

CUSTOM DESIGN & SUPPORT

- Other resistance curve & tolerance are available on request
- End wire stripped and Tinned or with connector assembly.
- Part can be supplied with customised connectors

PACKING

- Bulk layer packing
- 100 in poly bag
- Custom packing solution will be provided.

Consult Thermosen Technologies Pvt. Ltd. for custom product requirement

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