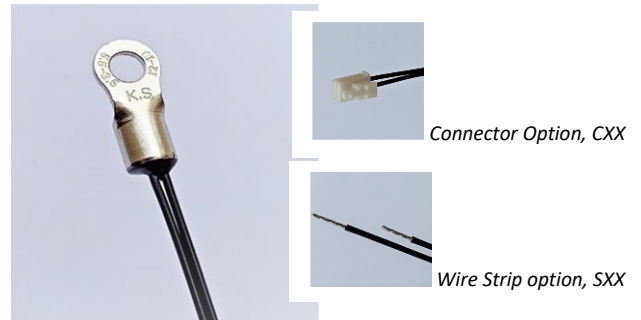
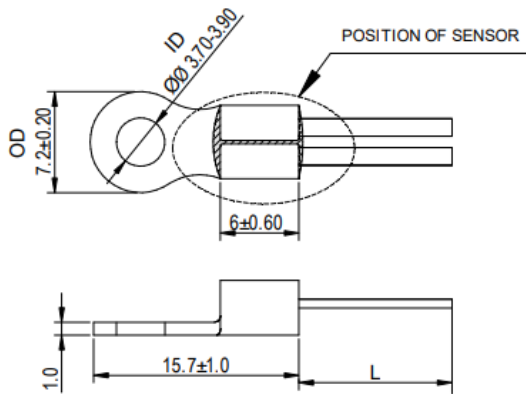


DESCRIPTION

NTC Thermistor assembled with 26AWG PTFE INSULATED BLACK WIRE (UL10344) which is mounted in a lug.



SPECIFICATIONS

SL NO	PARAMETER	VALUE	UNIT
1	Resistance at 25°C	1-150	KΩ
2	Resistance Tolerance	1 - 5	%
3	Beta Value (25/85)°C	3200 - 4500	K
4	Beta Tolerance	±1-2	%
5	Insulation Resistance	100	MΩ
6	Isolation Strength	1500	Vac
7	Response Time	6	Sec
8	Wire Length (L)	40-1000	mm
9	Storage Temperature	-40 to 85	°C
10	Operating temperature	-40 to +125	°C

FEATURES

- High Stability & reliability
- Fast response
- High measuring accuracy
- Easy to install
- Available with connector at the end terminal
- Complaint to RoHS Directive 2015/863/EU

APPLICATIONS

- Automotive Harness
- Power Electronics
- EV Battery Pack Temperature Sensing
- Heating / Cooling Devices
- Surface temperature measurement.
- Inverters
- Microwave ovens

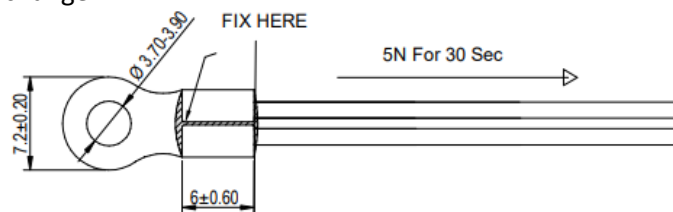
RELIABILITY SPECIFICATION

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. With 10K series resistor, input voltage:5V DC 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 $-40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 1000 (+48, -0)hr. With 10K series resistor, input voltage:5V DC 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	-40°C (Air Chamber,3 minute) -> RT(Air, under 1min) -> 125°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. With 10K series resistor, input voltage:5V DC 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

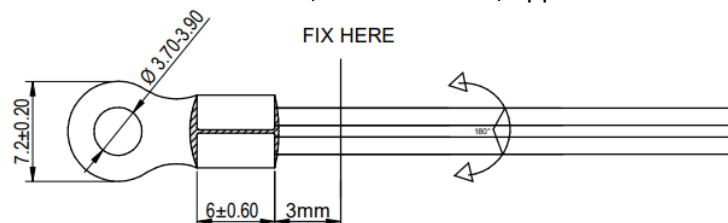
1.Terminal tensile strength test

Apply load of 5N to axial between lug and wire direction slowly and keep it for 30 ± 5 sec. after the test characteristics, appearance and shape shall not change.



2.Wire bending test

Lead wire will be fixed at 3mm from Lug end. Apply load for 30 sec 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.



SOLDERING

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

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EMAIL: info@thermosen.com WEBSITE: www.thermosen.com

PART LIST

Ordering Part Number	R ₂₅		B25/85	
	kΩ	± %	K	± %
TANRI-103RXBMAM35LXXXCXX/SXX	10K	1,2	3435	1
TANRI-103RXBMAM35LXXXCXX/SXX	10K	1,2	3500	1
TANRI-103RXBMBM35LXXXCXX/SXX	10K	1,2	3800	1
TANRI-103RXBMCM35LXXXCXX/SXX	10K	1,2	3964	1
TANRI-102R2BMDM35LXXXCXX/SXX	1K	2	3982	1
TANRI-225R2BMDM35LXXXCXX/SXX	2.25K	2	3982	1
TANRI-302R2BMDM35LXXXCXX/SXX	3K	2	3982	1
TANRI-472R2BMDM35LXXXCXX/SXX	4.7K	2	3982	1
TANRI-502R2BMDM35LXXXCXX/SXX	5K	2	3982	1
TANRI-103RXBMDM35LXXXCXX/SXX	10K	1,2	3982	1
TANRI-123R2BMDM35LXXXCXX/SXX	12K	2	3982	1
TANRI-203R2BMDM35LXXXCXX/SXX	20K	2	3982	1
TANRI-303R2BMDM35LXXXCXX/SXX	30K	2	3982	1
TANRI-103RXBMDM35LXXXCXX/SXX	10K	1,2	3982	1
TANRI-104R2BMDM35LXXXCXX/SXX	100K	2	3982	1
TANRI-473R2BMEM35LXXXCXX/SXX	47K	2	4050	1
TANRI-503R2BMEM35LXXXCXX/SXX	50K	2	4050	1

Part Numbering System

T	A	N	R	I	-XXX	R	BXX	M35	LXXX	CXX/SXX
THERMOSEN	ASSEMBLY	NTC	RING TYPE	SERIES CODE	RESISTANCE VALUE	RESISTANCE TOLERANCE	BETA VALUE	EYELET TYPE	LENGTH (Eg: 101 for 100mm (10x10 ¹), 102 for 1000mm (10x10 ²))	CONNECTOR TYPE TERMINAL STRIP LENGTH

RT CHART

Please refer to our website <https://www.thermosen.com/rt> for respective RT charts.

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
- Customized tolerance can be provided on request

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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