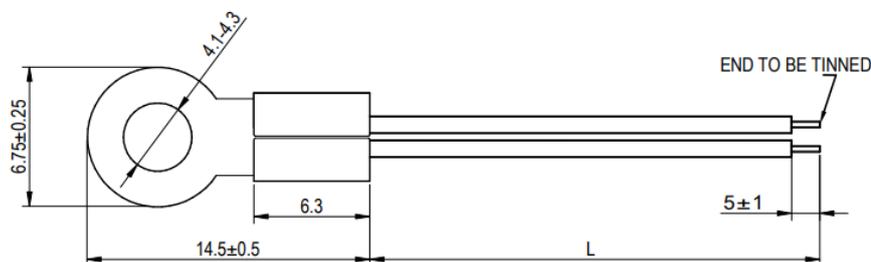


## DESCRIPTION

NTC ring( Lug type) thermistor assembled with 26 AWG blue PTFE insulated wire which is mounted in a lug. Thermistor encapsulated with connector at the end terminal (if there is requirement).



## SPECIFICATIONS

SL NO	PARAMETER	VALUE	UNIT
1	Resistance at 25°C	1-100	KΩ
2	Resistance Tolerance	±1, ±2	%
3	Beta Value (0/50)°C	3300-4252	K
4	Beta Tolerance	±1	%
5	Insulation Resistance	100	MΩ
6	Isolation Strength	500	VDC
7	Response Time	7	Sec
8	Length	25-300	mm
9	Storage Temperature	-40 to 85	°C
10	Operating temperature	-40 to +155	°C

## FEATURES

- High Stability & reliability
- Rugged construction
- Fast response
- High measuring accuracy

## APPLICATIONS

- UPS/Inverters
- BMS
- Automotive sector
- Power Electronics

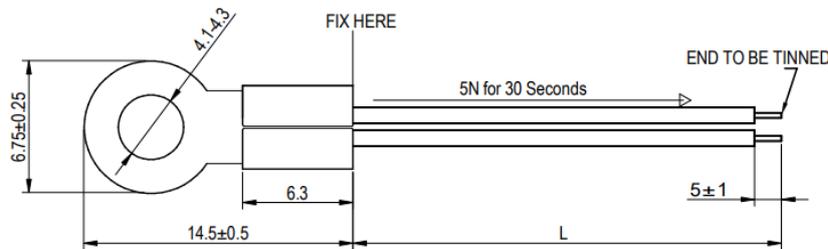
**RELIABILITY SPECIFICATION**

Description	Test Conditions	Characteristics Drift
<b>Dry Heat Test</b>	Elements are placed in an oven of temp. at 155°C± 5°C for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than ± 3%. ΔB after test are less than ± 2%.
<b>Cold Test</b>	Elements are placed in an oil bath of temperature at -40°C± 5°C for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than ± 3%. ΔB after test are less than ± 2%.
<b>Thermal Shock Test</b>	-40°C(Air Chamber,3 minute) -> RT(Air, under 1min) -> 150°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 ± 3%. ΔB after test are less than ± 2%.
<b>Damp Heat Test</b>	Elements are placed in a chamber of temp. at 60°C± 2°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 ± 3%. ΔB after test are less than ± 2%.

**Mechanical Test**

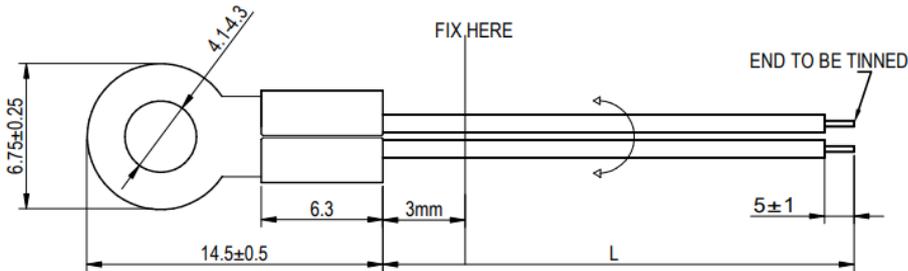
**1.Terminal tensile strength test**

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**

T	A	N	R	M-	XXX	RX	BX	LXXX
THERMOSEN	ASSEMBLY	NTC	RING TERMINAL	SERIES CODE	RESISTANCE VALUE	RESISTANCE TOLERANCE	BETA VALUE	LENGTH(Eg: 101 for 100mm (10x10 <sup>1</sup> ), 102 for 1000mm (10x10 <sup>2</sup> ))

**PART LIST**

Ordering Part Number	R <sub>25</sub>	R(TOL)	B(0/50)	B(TOL)	Curve Type
	kΩ	± %	K	± %	
TANRM-102RXBR LXXX	1K	2-5	3934	1	R
TANRM-225RXBDLXXX	2.252K	1-5	3892	1	D
TANRM-302RXBDLXXX	3K	1-5	3892	1	D
TANRM-472RXBDLXXX	4.7K	3-5	3892	1	D
TANRM-502RXBDLXXX	5K	1-5	3892	1	D
TANRM-103RVBDLXXX	10K	±0.1°C (±0.44%)	3892	1	D
TANRM-103RWBDLXXX	10K	±0.2°C (±0.88%)	3892	1	D
TANRM-103RXB4LXXX	10K	1-5	3410	1	4
TANRM-103RXBJLXXX	10K	1-5	3883	1	J
TANRM-103RXBCLXXX	10K	2-5	3339	1	C
TANRM-123RXB5LXXX	12K	1-5	3917	1	5
TANRM-303RXBDLXXX	30K	1-5	3892	1	D
TANRM-473RXB2LXXX	47K	1-5	3900	1	2
TANRM-104R1BJLXXX	100K	1-5	3883	1	J
TANRM-103RXBPLXXX	10K	1-5	3872	1	P
TANRM-104RXBSLXXX	100K	1-5	3917	1	S
TANRM-104RXBFLXXX	100K	1-5	4148	1	F
TANRM-103RXBALXXX	10K	1-5	3620	1	A
TANRM-103RXBZLXXX	10K	1-5	3696	1	Z
TANRM-202RXBELXXX	2K	1-5	3450	1	E

**RT CHART**

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

**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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