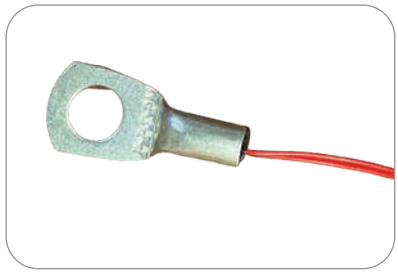
THERMOMETRICS
A COMMITMENT TO EXCELLENCE

RTS Series

Ring Terminal Temperature Sensor



RTS Series of Ring Terminal Temperature Sensors consist of an NTC chip thermistor mounted in an eyelet tag for surface temperature measurement.

Features

- Sensing element electrically isolated from eyelet
- Eyelet configurations to fit M3, M3.5, M4, M5, M6 screw sizes
- Range of wire lengths available from 50 mm to 2,000 mm
- Epoxy coated NTC thermistor chip
- Ring Terminal material tin plated copper
- Lead wire 28AWG XLPE insulated tin plated copper
- RoHS, Reach, Prop65 Compliant

Applications

- EV/HEV Bus Bars
- Battery Covers
- Thermal Management
- Heat Sinks
- Panel Enclosures

Type RTS Specifications	Value	Units
Operating Temperature	-40 to 125	°C
Storage Temperature	-40 to 85	°C
Resistance at 25°C	5k to 100k	Ω
Resistane tolerance	±1, ±2, ±5	%
Beta $_{25/85}$	3977 or 4252	K
Dissapation constant	1.5	mW/K
Time response	7	Sec.
Dielectric withstand between wires and eyelet	1,000	VDC

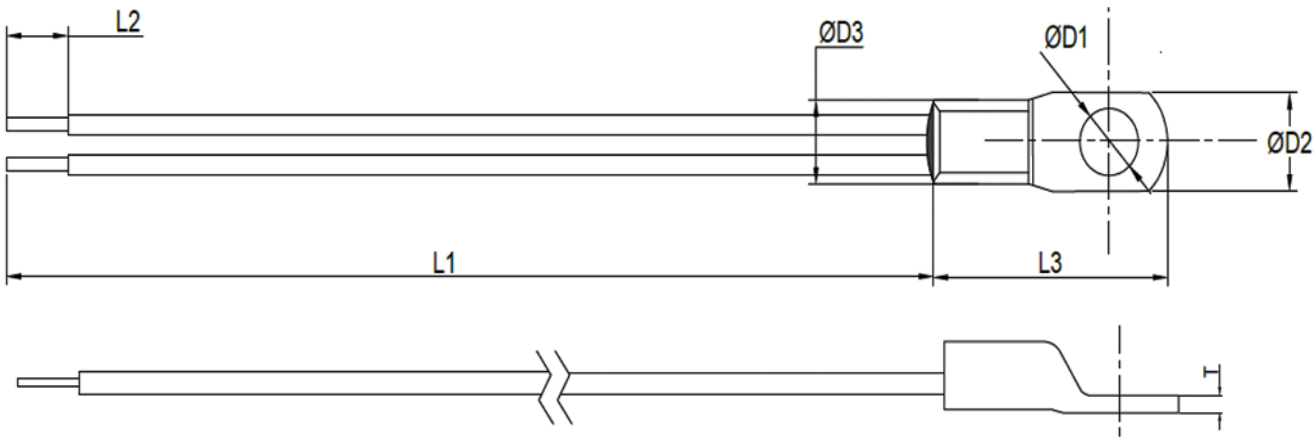
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RTS Series Ring Terminal Temperature Sensors

Dimensions

Mechanical Dimensions (mm)							
	D1	L1	L2	D3	T	L3	D2
M3	3.2	See dimensions drawing	6±2	4.5	1	16	7.5
M3.5	3.7		6±2	4.5	1	18	7.5
M4	4.2		6±2	5	1	20	10
M5	5.2		6±2	5	1	20	10
M6	6.4		6±2	5.6	1.2	25	10.8



Coding: Eyelet size and wire length are specified by product code – RTS203C1R5M3L501

RTS 203 C1 R5 M3 L500

Example	Description	Standard Values	
L500	Wire Length	L 500	50±5 mm
		L 151	150±5 mm
		L 201	200±5 mm
		L 501	500±5 mm
		L 102	1000±50 mm
		L 202	2000±50 mm
M3	Eyelet Size	M3, M35, M4, M5, M6	
R5	Tolerance	R1	1%
		R2	2%
		R5	5%
C1	Beta Value	C1	3977K
		C4	3435K
		CG	4252K
203	R25	502	5000Ω
		103	10000Ω
		203	20000Ω
		503	50000Ω
		104	100000Ω
RTS	Sensor Type		

RTS Series Ring Terminal Temperature Sensors

Sl No	Exti Part Number	Resistance at 25°C	Resistance Tolerance	B Value (25/85° C)	Dissipation Factor	Maximum Power at 25°C	Eyelet Type
1	RTS502RXMXLXXX	5000.0Ω	±1.0%, ±2.0% & ±5.0%	3977K	1.5 mW/K	75 mW	M3/M3.5/M4/ M5/M6
2	RTS103RXMXLXXX	10000.0 Ω	±1.0%, ±2.0% & ±5.0%	3977K			
3	RTS103RXMXLXXX	10000.0 Ω	±1.0%, ±2.0% & ±5.0%	3435K			
4	RTS203RXMXLXXX	20000.0 Ω	±1.0%, ±2.0% & ±5.0%	3977K			
5	RTS203RXMXLXXX	20000.0 Ω	±1.0%, ±2.0% & ±5.0%	4252K			
6	RTS503RXMXLXXX	50000.0 Ω	±1.0%, ±2.0% & ±5.0%	3977K			
7	RTS503RXMXLXXX	50000.0 Ω	±1.0%, ±2.0% & ±5.0%	4252K			
8	RTS104RXMXLXXX	100000.0 Ω	±1.0%, ±2.0% & ±5.0%	3977K			
9	RTS104RXMXLXXX	100000.0 Ω	±1.0%, ±2.0% & ±5.0%	4252K			

Note:

- Alternate resistance value, B value, tolerance available on customer request.
- Alternate wire type and wire length available on customer request.
- Alternate eyelet sizes available on customer request.

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