

T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

JRI Series

Noise Immune Ring Terminal Temperature Sensor

Thermometrics JRI Series of Noise Immune Ring Terminal Temperature Sensors consists of an NTC chip thermistor mounted in an eyelet tag for surface temperature measurement with a novel radio frequency (RF) decoupling function. These sensors are designed with an integrated bypass capacitor to prevent AC currents, generated from resonant electromagnetic interference (EMI), coupled with the wiring harness, from causing nuisance self-heating of the NTC element.

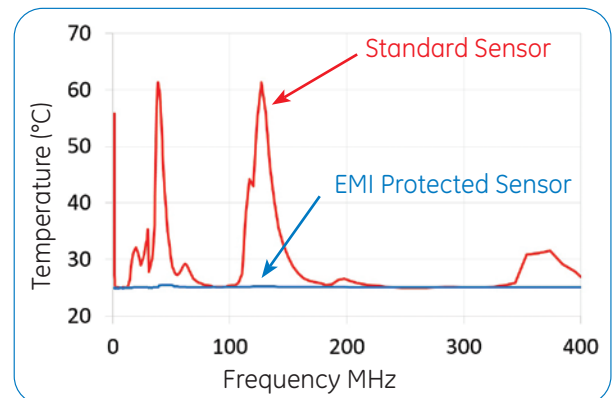


Applications

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

Features

- Suitable for surface temperature measurement
- Integrated EMI noise immunity
- EMI-protected upgrade for existing applications
- Reduced system cost by eliminating shielded cables and replacing twisted-pair wiring
- Eyelets to fit M3-M10 screw sizes
- Various lead lengths



Amphenol

Advanced Sensors

JRI Series - Specifications

Operating Temperature	-40°C to 105°C
R25	10KΩ ±1%
Capacitance	100NF ±15%
Threshold	500V STANDOFF DC 100 MΩ
Eyelet Material	Tinned Copper
Compliance	ROHS
Wire	UL94-V0 24AWG 150°C 300V, TWIN, XLPE, 1000mm

Resistance - Temperature Data

Temperature °C	R ₁ /R ₂₅ Nominal Ω	Resistance Tolerance ± %	Temperature Tolerance ± °C
-20	9.6807	6.80	1.17
-15	7.2809	6.58	1.17
-10	5.5253	6.35	1.17
-5	4.2292	6.14	1.17
0	3.2640	5.94	1.16
5	2.5391	5.74	1.16
10	1.9902	5.54	1.16
15	1.5713	5.36	1.15
20	1.2493	5.18	1.15
25	1.0000	5.00	1.14
30	0.8056	5.17	1.21
35	0.6530	5.34	1.29
40	0.5325	5.50	1.37
45	0.4367	5.65	1.45
50	0.3601	5.81	1.53
55	0.2985	5.96	1.61
60	0.2487	6.10	1.69
65	0.2082	6.24	1.78
70	0.1751	6.38	1.87
75	0.1480	6.52	1.96
80	0.1256	6.65	2.05
85	0.1070	6.77	2.15
90	0.09155	6.90	2.24
95	0.07864	7.02	2.34
100	0.06781	7.14	2.44
105	0.05868	7.26	2.54

Eyelet Dimensions / mm					
Eyelet Size	D	D2	L	L2	TL
M3.5	8	3.7	21.5	8.5	5
M4	8	4.3	23.8	8.5	5
M5	8.8	5.3	23.8	8.5	5
M6	12	6.4	23.8	8.5	5
M8	15	8.4	29.8	8.5	5
M10	15	10.5	29.8	8.5	5

JRI Series - Ordering Information

The code number to be ordered may be specified as follows:

Code Type

JRI Noise-immune chip thermistor in eyelet tag

Code Capacitance*

10NF 10nF \pm 15%

100NF 100nF \pm 15%

Code R25 and Tolerance**

103R2 10 K Ω \pm 2%

Code Eyelet Dimensions

Mx See table below.

Code Wire Length WL/mm

L500 50 \pm 5

L101 100 \pm 10

L201 200 \pm 20

L301 300 \pm 20

L401 400 \pm 20

L501 500 \pm 20

L102 1000 \pm 50

L202 2000 \pm 50

JRI - _____ - _____ - _____ - _____ - _____ **Typical Model Number**

Eyelet size and wire length are specified by the product code: e.g. JRI10NF103R2M4L501

* Other capacitance values available upon request.

** Other resistance and tolerance values available on request.

