

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

# NTC Type JR

## Chip Thermistor In Eyelet Tag



### Features

- Suitable for surface temperature measurement
- Sensing element electrically isolated from tag
- Two standard resistance values: 10 k $\Omega$  & 20 k $\Omega$  nominal at 77°F (25°C)
- Eyelets to fit M3, M4 & M5 screw sizes
- Range of wire lengths 1.97 in to 78.74 in (50 mm to 2000 mm) (dimension WL in diagram on page 2)
- Typical applications include semiconductor heatsinks, enclosure panels

**Amphenol**  
**Advanced Sensors**

# Type JR Specifications

## Description

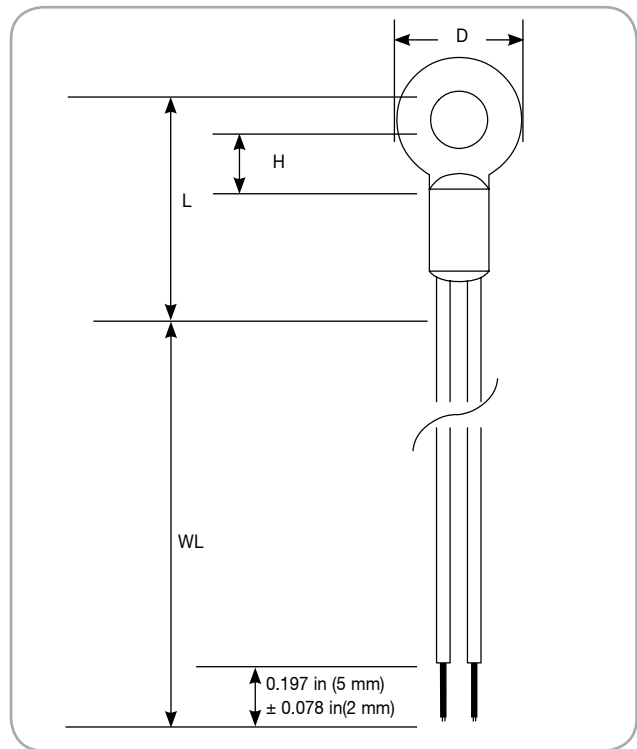
NTC chip thermistor with insulated flexible wires and housed in an eyelet tag.

## Options

- Other resistance - temperature characteristics
- Other wire types

## Data

- **R25:**  
10 K $\Omega$   $\pm$  5% (JR103R5MxLxxx) 20 K $\Omega$   $\pm$  5% (JR203R5MxLxxx)
- **B 25/85:**  
3977 K  $\pm$  0.75%
- **Temperature range:**  
-22°F to 221°F (-30°C to 105°C)
- **Insulation resistance:**  
500 VDC
- **Wire conductors:**  
Tin-plated copper 7 x 0.1 mm diameter
- **Wire insulation:**  
Irradiated PVC
- **Pack quantity and MOQ:**  
200 pcs



NTC Type JR dimensions

## Resistance-Temperature Data For JR Series

| Temperature<br>°C | R <sub>t</sub> /R <sub>25</sub><br>Nominal<br>Ω | Resistance<br>Tolerance<br>± % | Temperature<br>Tolerance<br>± °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                             |

# Type JR Specifications

## Ordering Information

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

### Code Type

JR Chip Thermistor In Eyelet Tag

#### Code R<sub>25</sub> and Tolerance

103R5 10 KΩ ± 5%

203R5 20 KΩ ± 5%

#### Code Wire Length WL in mm

M3

M4 see dimensions below

M5

#### Code Wire length WL in mm

L500 50 ± 5

L101 100 ± 10

L201 200 ± 20

L301 300 ± 20

L401 400 ± 20

L501 500 ± 20

L102 1000 ± 50

L152 1500 ± 50

L202 2000 ± 50

JR - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ Typical model number

Eyelet size and wire length are specified by the product code: e.g. JR203R5M3L500

### Eyelet Dimensions

| Eyelet size | H (mm) | D (mm) | L (mm) |
|-------------|--------|--------|--------|
| M3          | 3.2    | 6.4    | 12.3   |
| M4          | 4.3    | 8.5    | 16.8   |
| M5          | 5.3    | 8.5    | 16.8   |

