

# HIGH PRECISION THERMISTOR

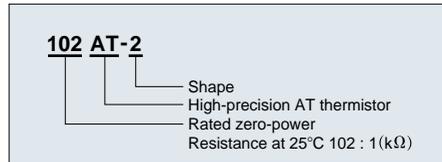
## AT THERMISTOR

The AT thermistor is a high-precision thermal sensing device featuring extremely small B-value tolerance and resistance.

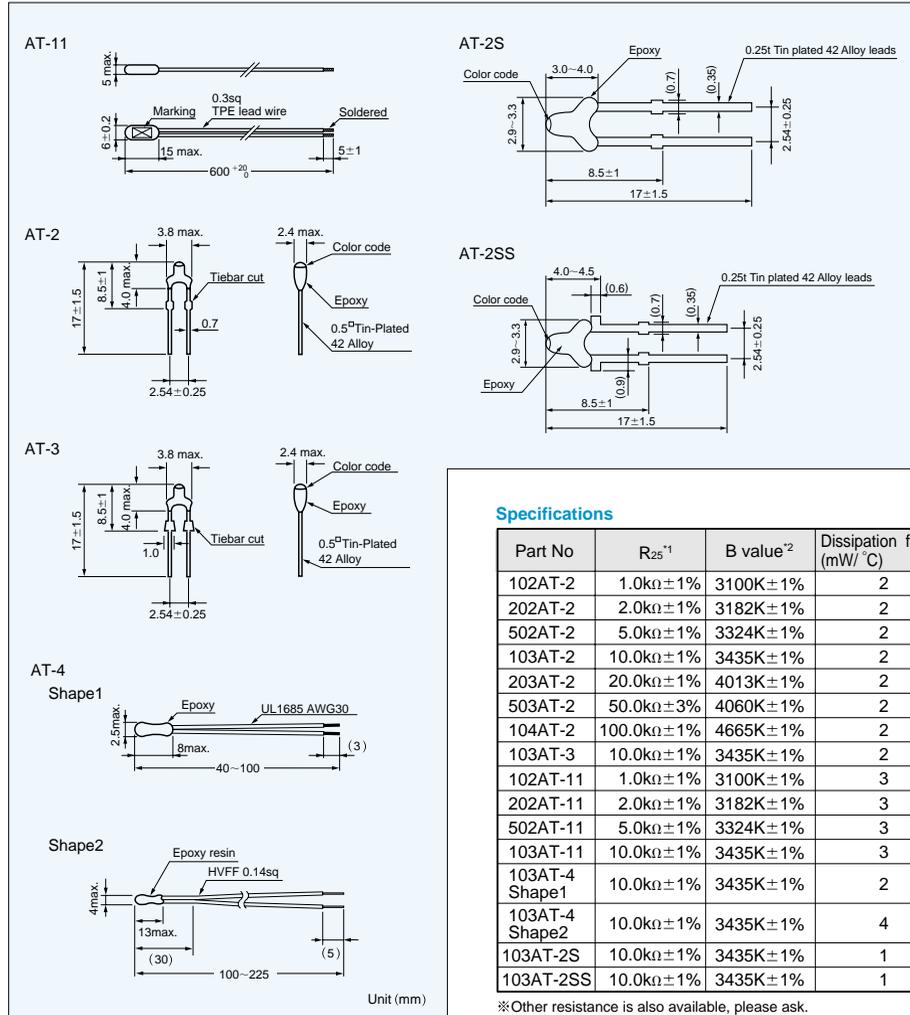
When used as a temperature gauge, the AT thermistor requires no adjustment between the control circuit and the sensor.

This insures temperature precision of  $\pm 0.3^{\circ}\text{C}$ . Temperature indicators and control instruments are now available for use with the thermistor.

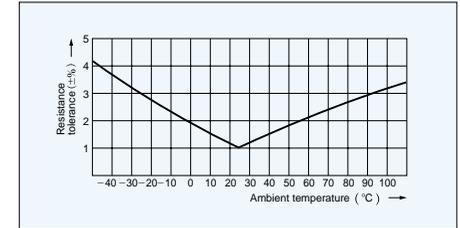
### Part number



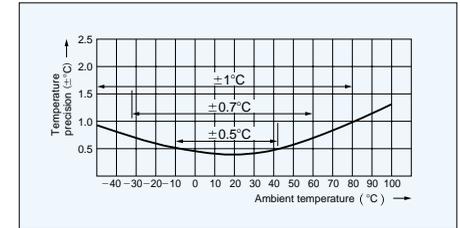
### Dimensions



### Resistance tolerance



### Interchange precision



### Specifications

| Part No        | R <sub>25</sub> <sup>1</sup> | B value <sup>2</sup> | Dissipation factor (mW/°C) | Thermal time constant (s) <sup>3</sup> | Rated power at 25°C (mW) | Operating temp. range(°C) | Color code |
|----------------|------------------------------|----------------------|----------------------------|--|--------------------------|---------------------------|------------|
| 102AT-2        | 1.0k $\Omega$ ±1%            | 3100K±1%             | 2                          | 15                                     | 10                       | -50~90                    | Black      |
| 202AT-2        | 2.0k $\Omega$ ±1%            | 3182K±1%             | 2                          | 15                                     | 10                       | -50~90                    | Red        |
| 502AT-2        | 5.0k $\Omega$ ±1%            | 3324K±1%             | 2                          | 15                                     | 10                       | -50~110                   | Yellow     |
| 103AT-2        | 10.0k $\Omega$ ±1%           | 3435K±1%             | 2                          | 15                                     | 10                       | -50~110                   | White      |
| 203AT-2        | 20.0k $\Omega$ ±1%           | 4013K±1%             | 2                          | 15                                     | 10                       | -50~110                   | None       |
| 503AT-2        | 50.0k $\Omega$ ±3%           | 4060K±1%             | 2                          | 15                                     | 10                       | -50~110                   | None       |
| 104AT-2        | 100.0k $\Omega$ ±1%          | 4665K±1%             | 2                          | 15                                     | 10                       | -50~110                   | None       |
| 103AT-3        | 10.0k $\Omega$ ±1%           | 3435K±1%             | 2                          | 15                                     | 10                       | -50~110                   | White      |
| 102AT-11       | 1.0k $\Omega$ ±1%            | 3100K±1%             | 3                          | 75                                     | 15                       | -50~90                    | None       |
| 202AT-11       | 2.0k $\Omega$ ±1%            | 3182K±1%             | 3                          | 75                                     | 15                       | -50~90                    | None       |
| 502AT-11       | 5.0k $\Omega$ ±1%            | 3324K±1%             | 3                          | 75                                     | 15                       | -50~105                   | None       |
| 103AT-11       | 10.0k $\Omega$ ±1%           | 3435K±1%             | 3                          | 75                                     | 15                       | -50~105                   | None       |
| 103AT-4 Shape1 | 10.0k $\Omega$ ±1%           | 3435K±1%             | 2                          | 10                                     | 10                       | -30~90                    | None       |
| 103AT-4 Shape2 | 10.0k $\Omega$ ±1%           | 3435K±1%             | 4                          | 35                                     | 20                       | -30~90                    | None       |
| 103AT-2S       | 10.0k $\Omega$ ±1%           | 3435K±1%             | 1                          | 15                                     | 5                        | -50~110                   | white      |
| 103AT-2SS      | 10.0k $\Omega$ ±1%           | 3435K±1%             | 1                          | 15                                     | 5                        | -50~110                   | white      |

\*Other resistance is also available, please ask.

<sup>1</sup> R<sub>25</sub>: Rated zero-power resistance value at 25°C.

<sup>2</sup> B value: determined by rated zero-power resistance at 25°C and 85°C.

<sup>3</sup> Time when thermistor temperature reaches 63.2% of the temperature difference. The value is measured in the air.