



ZT THERMISTORS SERIES SPECIFICATION

*** Outline:**

New production---ZT thermistors feature ultra thinness of 500um and superior electrical insulation.

*** Application :**

computer, printer

***Features :**

- 1) High stability and reliability.
- 2) Superior electrical insulation.
- 3) High precision of resistance value.
- 4) It is possible to use with safety in ambience that might contact with electrodes.
- 5) So small, light and solid in structure as to be convenient for auto mounting (to a printed circuit board).
- 6) Response quickly to and highly sensitive to thermal sensation.

***Specification :**

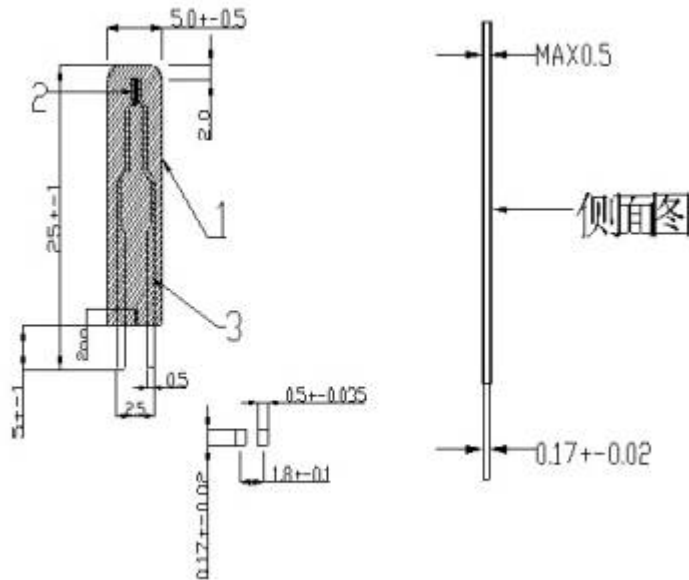
- 1) Range of resistance ratings at Zero-wattage(R25):10k Ω
- 2) Tolerance of R25: $\pm 1\%$, $\pm 2\%$, $\pm 3\%$.
- 3) Range of value B(B25/50 $^{\circ}$ C):3380K
- 4) Tolerance of B-value: $\pm 0.5\%$, $\pm 1\%$, $\pm 2\%$.
- 5) Dissipation coefficient:Min.0.7mW/ (in still air)
- 6) Heat Time Constant: Max.5.0S (in still air)
- 7) Range of working temperature: -30 $^{\circ}$ C~ +125 $^{\circ}$ C
- 8) Wattage Rating: ≤ 3.5 mW。

*** Part Number :**

| | | | |
|----|-----|----|----|
| ZT | 103 | PI | 25 |
| ① | ② | ③ | ④ |

- ① ZT thermistor
- ② resistance : 103----10K Ω
- ③ PI:polyimide film
- ④ 25:wirelead 25MM

*** Dimensions (mm) :**



NTC High-precision Temperature Sensor of WF-type



Temperature sensors for surface yield

Feature :

Metal contact surface yields fast temperature response.

Resistance : $R_{25}=10K\Omega\pm 1\%$

B Value : $B_{25/50}=3950K\pm 1\%$

Thermal time constant(in water) : 20 sec

Thermal dissipation constant : $3MW/^{\circ}C$

Operating temperature range : -
 $20^{\circ}C\sim +80^{\circ}C$



Temperature sensors for thermometer

Feature :

Quick temperature response.

Resistance : $R_{25}=10K\Omega\pm 1\%$

B Value : $B_{25/50}=3380K\pm 1\%$

Thermal time constant(in water) : 5S (in water)

Thermal dissipation constant : $4MW/^{\circ}C$

Operating temperature range : -
 $40^{\circ}C\sim +100^{\circ}C$



Temperature sensors for water boilers

Feature :

Resistant to heat shock and moisture.
Quick temperature response.
Resistance : $R_{25}=10K\Omega\pm 2\%$
B Value : $B_{25/85}=3435K\pm 1\%$
Thermal time constant(in water) : 5 sec
Thermal dissipation constant : $0.75MW/^{\circ}C$
Operating temperature range : $-50^{\circ}C\sim +120^{\circ}C$



Temperature sensors for automobile

Feature :

Quick temperature response.
Resistance : $R_{25}=1.5K\Omega\pm 3\%$
B Value : $B_{0/15}=3820K\pm 2\%$
Thermal time constant(in water) : 5S (in water)
Thermal dissipation constant : $4MW/^{\circ}C$
Operating temperature range : $-30^{\circ}C\sim +80^{\circ}C$



Temperature sensors for air-condition(copper cup)

Feature :

Moisture resistant.
Small with quick temperature response.
Resistance : $R_{25}=5K\Omega\pm 1\%$
B Value : $B_{25/50}=3270K\pm 1\%$
Thermal time constant(in water) : 30 sec
Thermal dissipation constant : $5MW/^{\circ}C$
Operating temperature range : $-20^{\circ}C\sim +80^{\circ}C$



Temperature sensors for air-condition (epoxy)

Feature :

Moisture resistant.
Small with quick temperature response.
Resistance : $R_{25}=10K\Omega\pm 1\%$
B Value : $B_{25/50}=3470K\pm 1\%$
Thermal time constant(in water) : 30 sec
Thermal dissipation constant : $5MW/^{\circ}C$
Operating temperature range : $-20^{\circ}C\sim +80^{\circ}C$



Temperature sensors for microwave

Feature :

Resistant to high temperature.
Quick temperature response.
Resistance : $R_{200}=1K\Omega\pm 5\%$
B Value : $B_{100/200}=4537K\pm 3\%$
Thermal time constant(in water) : 5 sec
Thermal dissipation constant : $1.3MW/^{\circ}C$
Operating temperature range : $-30^{\circ}C\sim +300^{\circ}C$



Temperature sensors for refrigeratory

Feature :

Moisture resistant.
Resistance : $R_5=5.06K\Omega\pm 2\%$
B Value : $B_{5/25}=3839K\pm 2\%$
Thermal time constant(in water) : 20 sec
Thermal dissipation constant : $3MW/^{\circ}C$
Operating temperature range : $-30^{\circ}C\sim +75^{\circ}C$



Temperature sensors for electronic boiler

Feature :

Quick temperature response.
Resistant to high temperature.
Resistance : $R_{25}=100K\Omega\pm 1\%$
B Value : $B_{25/50}=3990K\pm 1\%$
Thermal time constant(in water) : 8S(in water)
Thermal dissipation constant : $4MW/^{\circ}C$
Operating temperature range : -
 $30^{\circ}C\sim +250^{\circ}C$



Temperature sensors for domestic appliances

Feature :

Quick temperature response.
Resistance : $R_{200}=1K\Omega\pm 3\%$
B Value : $B_{25/50}=4050K\pm 2\%$
Thermal time constant(in water) : 20 sec
Thermal dissipation constant : $3MW/^{\circ}C$
Operating temperature range : -
 $30^{\circ}C\sim +260^{\circ}C$



Temperature sensors for bean serosity machine

Feature :

Quick temperature response & Moisture resistant.
Resistance : $R_{25}=23K\Omega\pm 1\%$
B Value : $B_{25/50}=3950K\pm 1\%$
Thermal time constant(in water) : 5S(in water)
Thermal dissipation constant : $4MW/^{\circ}C$
Operating temperature range : -
 $30^{\circ}C\sim +100^{\circ}C$