

## NTC Thermistor



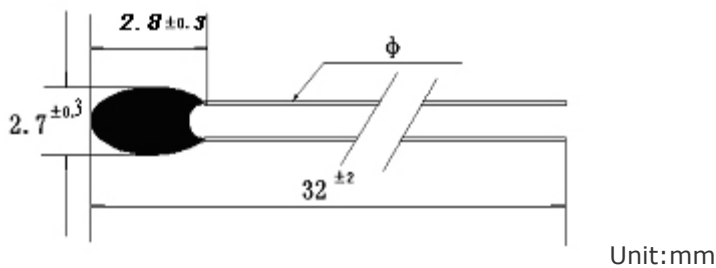
### Application

- Electric thermo meter, electric calendar, electric clock temperature presentation and electric gifts.
- Cooling and heating equipment, electric heating constant appliances.
- Automobile electric temperature measurement and control circuit.
- Temperature sensor and temperature instrument.
- Medical electrical equipment and electric toilet facilities.

Product Name	Product Picture
KPD/MF5A Epoxy-Sealed series NTC thermistor	

### Detail

#### (1) Appearance and Dimensions



Φ:0.2~0.6, specific dimensions may be made as required by customers.

#### (2) Features

- Epoxy enclosed, small in volume, with quick response time and high sensitivity.
- Stable in working, high in reliability and precision.
- Consistent and easy to interchange.

#### (3) Purpose

- Precision temperature measurement.
- Temperature compensation for electric circuits.
- Temperature measurement and control circuit.

#### (4) Application

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(5) Description of Product Types and Specifications

K P D / MF5A- 1 0 3 G - 395 F  
 1                    2                    3                    4                    5                    6

1. KPD --- Abbreviations for KePengDa.
2. MF --- Indicates negative temperature (NTC) coefficient thermistor.
3. 5A --- Temperature measurement type epoxy enclosed thermistor.
4. 103 --- Nominal resistance of thermistor, e.g. 103 indicates that the nominal resistance of the thermistor is  $10 * 10^3 (\Omega)$ .
5. G --- Resistance error (precision), e.g. G indicates the error (precision) of the thermistors is  $\pm 2\%$ .
6. 360 --- Material factor  $B_{25/50}$  value of thermistor, e.g.360 indicates the material factor  $B_{25/50}$  value of the thermistor is  $360*10K$ .
7. F ---  $B_{25/50}$  error (precision), e.g. F indicates the  $B_{25/50}$  error (precision) of the thermistor is  $\pm 1\%$ .

Note : $R_{25}$  precision :F ( $\pm 1\%$ ) ,G ( $\pm 2\%$ ) ,H ( $\pm 3\%$ ) ,J ( $\pm 5\%$ ) ,K ( $\pm 10\%$ ) .

$B_{25/50}$  precision :F ( $\pm 1\%$ ) ,G ( $\pm 2\%$ ) ,H ( $\pm 3\%$ ) .

(6) Main Technical Parameters

Parameters	Parameter range	Test conditions
$R_{25}$ (nominal resistance)	500 $\Omega$ ~ 200K $\Omega$	Constant temperature 25 $^{\circ}C \pm 0.05$ $^{\circ}C$
Allowed $R_{25}$ deviation (%)	$\pm 1$ 、 $\pm 2$ 、 $\pm 3$ 、 $\pm 5$ 、 $\pm 10$	Constant temperature 25 $^{\circ}C \pm 0.05$ $^{\circ}C$
$B_{25/50}$ (material coefficient) (thermal sensitive index)	3000 ~ 5000K	Constant temperature 25 $^{\circ}C \pm 0.05$ $^{\circ}C$ Constant temperature 50 $^{\circ}C \pm 0.05$ $^{\circ}C$
Allowed $B_{25/50}$ deviation(%)	$\pm 1$ 、 $\pm 2$ 、 $\pm 3$	Constant temperature 25, $^{\circ}C \pm 0.05$ $^{\circ}C$ Constant temperature 50 $^{\circ}C \pm 0.05$ $^{\circ}C$
$\delta$ (dissipation factor)	$\geq 0.7mw/ ^{\circ}C$	In still air

$\tau$ (thermal time constant)	$\leq 3.4\text{S}$	In still air
$T_A$ (working temperature)	$-40\text{ }^\circ\text{C} \sim +125\text{ }^\circ\text{C}$	
$P_N$ (rated power)	50 mw	In maximum working temperature