

# Temperature Sensor Specification

MFE Series

This Specification indicates the properties, testcondition, structure and dimension of MFE series NTC temp.sensor manufactured by Hefei Sensing Electronic Co.,LTD. It is sincerely for your company's confirmation.

Any doubt, Please contact withus by 86 5515845356, or if there isn't any question, please return fax to confirm it. No return fax willbe deemed to beaccepted.

Please inform us if you change your usage of the sensor.

Customer:				
Customer	Confirmer			
Confirmation	Checker			
	Approval			

#### **ELECTRICAL CHARACTERISTIC**

Item	Symbol	Test Condition	Performance	Unit
1.1 Rated resistance	R25℃	+25±0.05℃	10±1%	kΩ
1.2 B value	B25/50	+25±0.05℃、+50±0.05℃	3470±1%	K
1.3 Time constant	τ	In well stirred water	€5	sec
1.4 Diss ipation factor	δ	In still air	≥2.5	mW/°C
1.5 Voltage withstanding	U	AC1500V (Peak value)	No destroy or spark	V
1.6 Insulation resistance	Ri	DC500V	≥100	МΩ
1.7 Max.power	Pmax	Ambient Temp.+25℃	≤0.1	mW

### 2. Reliability test

2.1 Intensity: Fix the probe ,Pull the lead by striped wire end with 10N force for  $10\pm1$ sec. No visible damage.

2.2 High Temp.Store (In air)

105 $\pm3$ <sup>°</sup>C 1000h

△R25/R25≤3%

2.3 Low Temp.Store (In air)

-30±3℃ 1000h

△R25/R25≤3%

2.4 Heat and Humidity Stability

 $40\pm2$ °C 92%RH $\sim$ 98%RH 240h

△R25/R25≤3%

2.5 Temperature Shift

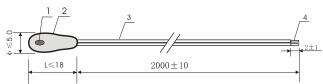
 $-30\pm3$ °C  $\times30$ min  $\xrightarrow[2\pm1min]{\text{normal temp.}}$   $105\pm3$ °C  $\times30$ min 5 times

△R25/R25≤3%

## 3. Operation Notice

- 3.1 Application: Temperature measure and control;
- 3.2 Operating Temp. Range:  $-30^{\circ}$ C  $\sim$ +105 $^{\circ}$ C;
- 3.3 Avoid measure error caused by self heat when over current pass through.

- 3. 4 Avoid excessive heat shock, The hot air blow should be at least 10mm to the probe in case heat shrink protection tube need to be attached.
- 4. RESISTANCETEMPERATURETABLE (see accessory P/N: J070608-7)
- 5, SIZE DRAWING: (unit:mm)



Item	Name	Material Spec.	Qty.	Remark
1	Component	NTC Thermistor (B)	1	
2	Epoxy Resin		1	Black
3	Cable	UL 2651 26AWG ZIP wire black	1	
4	Tin	$2\pm1\mathrm{mm}$	2	

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