

This Specification indicates the properties, test condition, structure and dimension of MFE series temp. sensor manufactured by Hefei Sensing Electronic Co., LTD. It is sincerely for your company's confirmation.  
 Any doubt, Please contact with us by 86 551 65845356, or if there isn't any question, please return fax to confirm it.  
 No return fax will be deemed to be accepted.  
 Please inform us if you change your usage of the sensor.

Customer:		
Customer	Confirmer	
Confirmation	Checker	
	Approval	

### 1、ELECTRICAL CHARACTERISTIC

Item	Symbol	Test Condition	Performance	Unit
1.1 Rated resistance	R <sub>25°C</sub>	+25±0.05°C	10±1%	kΩ
1.2 B value	B <sub>25/50</sub>	+25±0.05°C、+50±0.05°C	3950±1%	K
1.3 Time constant	τ	In still air	≤60	sec
1.4 Dissipation factor	δ	In still air	≥4.0	mW/°C
1.5 Voltage withstanding	U	AC750V (Peak value)	No destroy or spark	V
1.6 Insulation resistance	Ri	DC500V	≥100	MΩ
1.7 Max.power	Pmax	Ambient Temp.+25°C	≤60	mW

### 2、Reliability test

2.1 Intensity : Fix the probe , Pull the lead by striped wire end with 10N force for 10±1 sec.

No visible damage.

2.2 High Temp.Store (In air)

125±3°C 1000h

ΔR<sub>25</sub>/R<sub>25</sub>≤3%

2.3 Low Temp.Store (In air)

-40±3°C 1000h

ΔR<sub>25</sub>/R<sub>25</sub>≤3%

2.4 Heat and Humidity Stability

40±2°C 98%RH 1000h

ΔR<sub>25</sub>/R<sub>25</sub>≤3%

2.5 Temperature Shift

-40±3°C × 30min  $\xleftrightarrow[2\pm 1min]{Nor.Temp.}$  105±3°C × 30min 10 times

ΔR<sub>25</sub>/R<sub>25</sub>≤3%

### 3、Operation Notice

3.1 Application: Temperature measure and control;

3.2 Operating Temp. Range: -40°C ~ +125°C ;

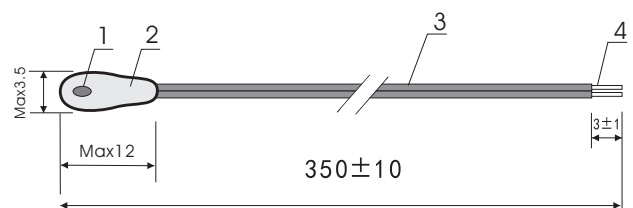
3.3 Avoid measure error caused by self heat when over current pass through.

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 .

3.5 Probe cannot be used in water (with steam), high humidity, electrolysis, salt, acid, alkaline and organic solvents and other corrosive environments

### 4、RESISTANCE TEMPERATURE TABLE (see accessory P/N:)

### 5、SIZE DRAWING: (unit:mm)



Item	Name	Material Spec.	Qty.	Remark
1	Component	NTC Thermistor	1	MF5A
2	Probe	Epoxy resin		Black
3	Wire	UL4411 AWG26	1	Black
4	Tinned		2	

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SJ07.210918-X1	A	2021-09-18	Wang Run	Yanggui Lin

**HEFEI SENSING ELECTRONIC CO., LTD.**