## MF55 10K 50K 100K Thin Film NTC Temperature Measurement Sensor Is Suitable For Integrated Circuit Batteries, Heating Clo

## **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity:
- Price:

Our Product Introduction

- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:



Export Package / Negotiation

T/T, L/C, Western Union

24 million per year

Negotiation

## **Product Specification**

- Features:
- Resistance Value:
- Usage:
- Operating Temperature:
- Customized:
- Resistance Tolerance: F±1%,G:±2%, H:±3%,J:±5%,K:±10%

-40~+200degC

Available

**Temperature Sensor** 

Highlight:

50K Electric Temp Sensor, 100K Electric Temp Sensor, Thin Temp Sensor NTC

High Sensitivity And Fast Response

1K, 5K, 10K, 50K, 100K, 15K



### More Images



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#### **Product Description**

#### MF55 10K 50K 100K Thin Film NTC Temperature Measurement Sensor Is Suitable For Integrated Circuit Batteries, **Heating Clo**

product information

Product Type: Thin Film NTC Temperature Sensor

Product features: Convenient for temperature measurement in narrow spaces

Model usage: temperature measurement/temperature control/overheat protection

Operating temperature range: -40~+125°C

Thermal time constant: about 10S

Waterproof level: Not waterproof Product qualification: Meet certification

Product application scope:

Neck massager, heating clothing, integrated circuit battery, smart knee pads, etc. Product customization instructions:

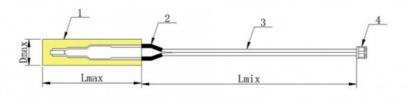
(1) Resistance value of the product (nominal resistance value at 25°C, or others)

- (2) Product accuracy (1%~5%)
- (3) B value coefficient of the product

(4) Wire model and length (color, length, temperature resistance requirements)

(5) Wire tail specifications (tin dipped, socket plug-in, special specifications)

(6) Probe specifications and materials (nickel-plated copper, red copper, stainless steel, ABS plastic shell) (7)Use temperature range



Product drawings are for reference; can be customized according to required parameters, specifications, and length (drawings and samples are provided)

#### **Product Description**

Туре	NTC Temperature Sensor
Resisitance	1K~5M Ω(1k 5k 4.7k 10k 20k 30k 50k 100k 150k 200k 300k)Customized
Beta Value	3380k 3435k 3500k 3950k 4050k 4150k 4250k 4450k Customized
Housing	Cooper/Stainless/aluminum/Brass/Plastic/Nylon/Others Customized
Wire	20/22/24/26/28/30/32AWG PP/PVC/PTFE/PFA/TPE/FEP Customized
Connector	JST/SYP/MOLEX/DUPONT/TE Customized
Installation	Flanged/Surface/Threaded/Plastic/Straight/Film/LUG/SMD/THT Customized
Accuracy	0.1% 0.5% 1% 2% 3% 5% 10% Customized
Temperature range	-40~300 Customized
Wire Length	10mm~10000mm Customized



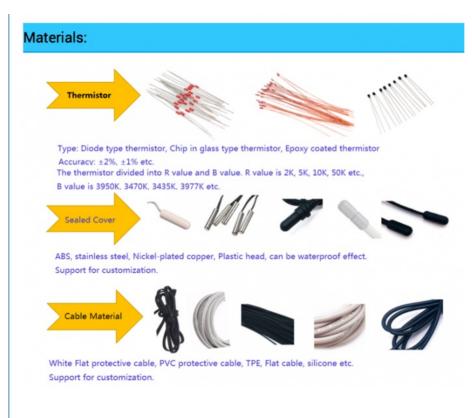
#### Applications

Temperature measurement and control of household air-conditioner, refrigerator, icebox,water heater,drinking machine,radiator,dishwasher, disinfector,washing machine, drying machine,middle-or-low-temperature drying box and constant

temperature box.

#### Conventional product electrical performance parameters

Part No.	R25°C		Rated Power	Dissipation Factor(δ)	Thermal time
Fait NO.	(ΚΩ)	25/50°C	@25°C(mW)	(mW/°C)	Constant (S)
TS502 3274A	5.0	3274	10-20	2-4	5-20
TS502□3435B	5.0	3435	10-20	2-4	5-20
TS502 3470A	5.0	3470	10-20	2-4	5-20
TS502 3950A	5.0	3950	10-20	2-4	5-20
TS103□3274A	10.0	3274	10-20	2-4	5-20
TS103□3435B	10.0	3435	10-20	2-4	5-20
TS103□3470A	10.0	3470	10-20	2-4	5-20
TS103 3950A	10.0	3950	10-20	2-4	5-20
TS103□4100A	10.0	4100	10-20	2-4	5-20
TS153 03950A	15.0	3950	10-20	2-4	5-20
TS15304100A	15.0	4100	10-20	2-4	5-20
TS203□3950A	20.0	3950	10-20	2-4	5-20
TS203□4100A	20.0	4100	10-20	2-4	5-20
TS22304200A	22.0	4200	10-20	2-4	5-20
TS403□3928A	40.0	3928	10-20	2-4	5-20
TS50303950A	50.0	3950	10-20	2-4	5-20
TS503□4100A	50.0	4100	10-20	2-4	5-20
TS104□3950A	100.0	3950	10-20	2-4	5-20
TS104□4100A	100.0	4100	10-20	2-4	5-20
TS104□4400A	100.0	4400	10-20	2-4	5-20



#### Working principle of temperature sensor

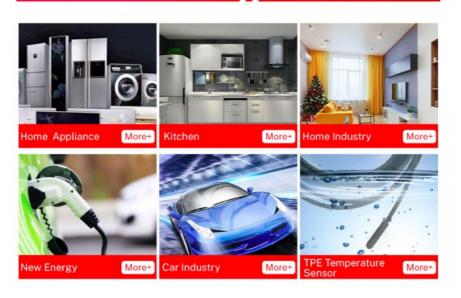
Using the NTC thermistor under a certain measurement power, the resistance value drops rapidly as the temperature rises. Utilizing this feature, the NTC thermistor can be used to determine the corresponding temperature by measuring its resistance value, so as to achieve the purpose of detecting and controlling the temperature.

Test Item	Test Stand ard	Test method	Performance requirements
Zero Power Resistance	IEC 60539 -1	Immerse samples in the constant temperature bath at 25°C±0.005°C,test steady resistance	Resistance tol ±1%
B value	IEC60 539-1	Immerse samples in the constant temperature bath at 25°C,50°C(or 85°C), test steady resistance,and calculate B value	Resistance tol ±1%
Free fall	IEC60 068-2- 32	Fall height: 1.5±0.1m,Surface: Cement , 1 time	No obvious damage, R25 ∆R/R≤±1%
Insulation	IEC60 539-1	500V pressure on insulation shell test insulation resistance	>500MOhm
Withstand voltage	IEC60 539-1	Withstand voltage: 1500V/AC ,Leakage current:2mA Lasting: 60sec	No obvious damage
Tension		Pull uniform speed at the end, F>4.0KG(requested by customer)	No obvious damage, R25 ∆R/R≤±1%
Vibration	Q/HB m 108- 94	Test frequency: 10~500Hz,swing: 1.2mm acceleration: 30m/s2 Direction X,Y,Z Time:8Hour/direction	No obvious damage, R25 ∆R/R≤±1%
Steady humidity and heat	IEC60 068-2- 78	Temp:40±2°C Humidity:92-95%RH Time:1000±24Hour	No obvious damage, R25 ∆R/R≤±1%
Thermal time constant		Immerse in 25°C water,after thermal balance,immerse in 85°C,resistance arrives 63.2%,calculate total time	<10 sec
High temperatur e storage	IEC60 068-2- 2	Temp:125°C±5°C Time: 1000±24Hour	No obvious damage, R25 ∆R/R≤±1%

#### **Reliability Test**

	IEC60 068-2- 14		No obvious damage, R25 ∆R/R≤±1%
IK NOCK		Acceleration:250m/s2 Pulse lasting: 6ms Knock times:	No obvious damage, R25 ∆R/R≤±1%
Low temperatur e storage	IEC60 068-2- 1		No obvious damage, R25 ∆R/R≤±1%
Salt spray			No obvious damage, R25 ∆R/R≤±1%

# PRODUCT CATEGORIES







Room 101, No. 21, Huayuanzai Road, Chongmei, Chashan Town, Dongguan City, Guangdong Province