

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF52B测温型NTC热敏电阻器 (可定制)

MF52B Series Temperature-Measurement NTC Thermistor (Customizable)

通过AEC-Q200检测

Passed AEC-Q200 Testing

● 应用范围

医疗设备、汽车电子、电动工具、智能家居、锂电保护、家用电器、通讯设备、智能穿戴、移动电源

● Applications

Medical Devices, Automotive Electronics, Power Tools, Smart Home, Lithium Battery Protection, Home Appliances, Communication Equipment, Smart Wearables, Mobile Power Sources

● 特点

- 引出线为漆包线, 线材材质有铜、钢, 可满足不同使用场景需求
- 采用多种尺寸NTC热敏芯片, 测量功率有多种选择
- 体积小、测温精度高
- 引出线有高温漆包线, 可在180°C高温下长期工作
- 可以提供高绝缘、高耐压、高可靠性产品
- 规模化批量生产, 性价比高

● Features

- The lead wires are enamel-insulated, come in copper and steel, etc, ensuring compatibility with a wide range of applications.
- Using various sizes of NTC thermistor chips, offering multiple power measurement options.
- Compact size, High temperature measurement accuracy.
- The lead wires are high-temperature enameled wires, designed for long-term operation at temperatures up to180°C
- We provide products with high insulation, high withstand voltage, and high reliability.
- Mass Production, High Cost-performance Ratio.

● 产品标志说明 Marking Instruction

MF52 B 103 F 3950 F A CP Z 0180 (T<sub>1</sub>)

特殊高性能产品 (常规品: 省略) Special High-Performance Products (Standard products: omitted)

线材长度: 如180mm-0180 Wire Length: e.g., 0180 represents 180mm.

线材长度代码: Z-总长、L-线长 Wire Length Code: Z-Total Length, L-Wire Length

线芯材质: CP-铜包钢线、Cu -铜线  
Wire Core Material: CP- Copper-clad Steel Wire, Cu-Copper wire

包封头尺寸代码: 见下表1/表2. Dimensions Code: Refer to Table 1/2 below

B值允许偏差代号(±1%时省略)  
Allowable B Value Tolerance Code (Annotation omitted for ±1%)

B值: 3950K B Value: 3950K

阻值允许偏差代号: F: ±1%, G: ±2%, H: ±3%, J: ±5%  
Allowable Resistance Value Tolerance Code: F: ±1%, G: ±2%, H: ±3%, J: ±5%

额定零功率电阻值: 103为10KΩ  
Rated Zero-Power Resistance Value: 103 represents 10KΩ

引线:漆包线 Wires: Enameled Wires

型号:MF52系列 Type:MF52 Series



● 安规认证 Certifications



UL1434认证  
UL1434 Certification  
(File# E240991)



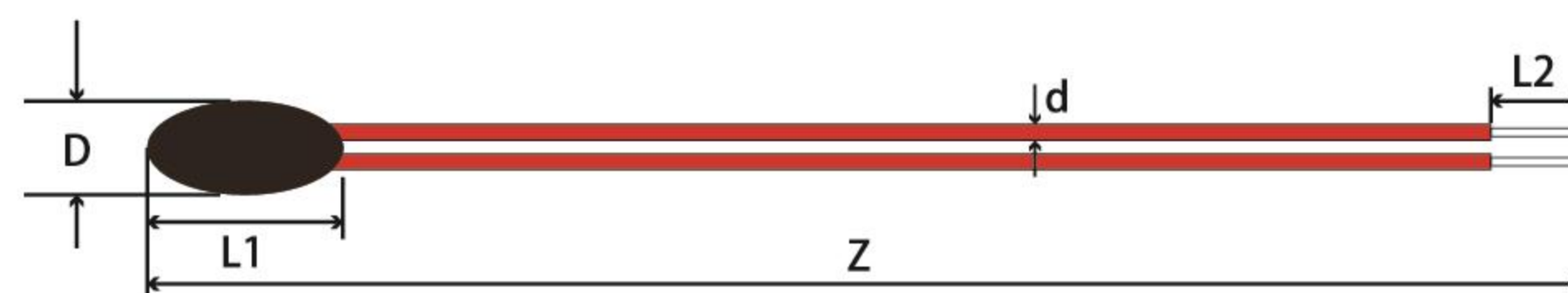
CQC 认证  
CQC Certification  
(File# 07001019009)



TUV 认证  
TUV Certification  
(File# R50245892)



● 表1：(普通品)外形尺寸代码表 Table 1: (Standard Product) Dimension Code Table (mm)



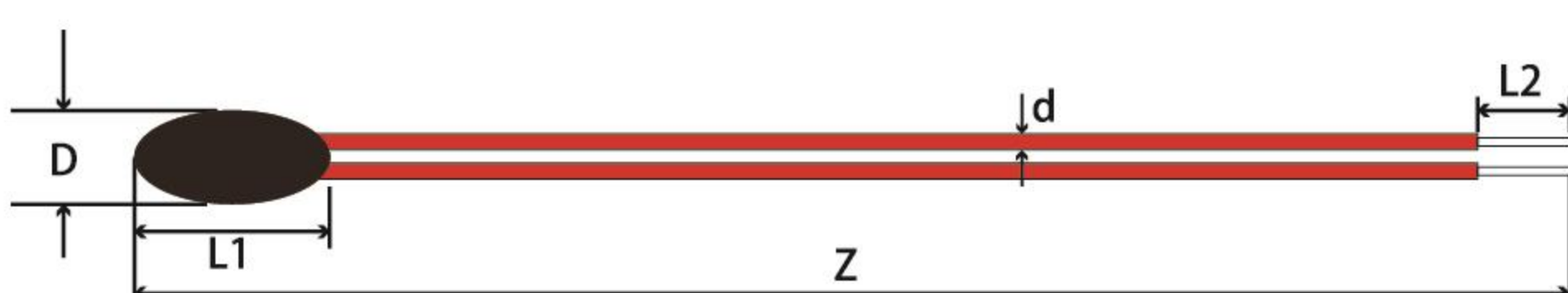
代码 Code	D(普通) Standard	L1	Z±2	L2±0.5	d	线材种类 Type of wire	25°C时最大额定功耗 Max. Power Rating at 25°C	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	工作温度 Operating Temperature
							Pmax (mW)	δ (mW/°C)	τ (s)	(°C)
A	1.0 (-0.2/+0)	≤4.0	35mm 40mm 50mm 60mm	3.0	0.17	CP 漆包线 CP Enameled Wires	3	0.6	2	-40~+125
B *	1.0 (-0.05/±0.15)	≤4.0		2.0	0.18	CP 漆包线 CP Enameled Wires	3	0.6	2	
C	1.2(±0.15)	≤4.0		2.0	0.23	CP/Cu 漆包线 CP/Cu Enameled Wires	3	0.6	2	
D *	1.25 (±0.15)	≤5.0		2.0	0.28	CP/Cu 漆包线 CP/Cu Enameled Wires	3	0.6	4	
E	1.4 (±0.2)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wires	3	0.6	4	
F	1.6 (±0.3)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wires	7.5	1.5	7	
G	1.8 (±0.3)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wires	10	2.0	10	

\*号为推荐尺寸代码 \* indicates recommended size code.

技术性能指标、线径、线长可定制 (非标准制品总长: 12-245mm)

The technical performance indicators, wire diameter, and wire length can be customized (non-standard custom product total length: 12-245mm).

● 表2：(特殊高性能产品)外形尺寸代码表 Table 2: (Special High Performance Product) Dimension Code Table (mm)



代码 Code	D(高能) High-Performance	L1	Z±2	L2±0.5	d	线材种类 Type of wire	25°C时最大额定功耗 Max. Power Rating at 25°C	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	工作温度 Operating Temperature
							Pmax (mW)	δ (mW/°C)	τ (s)	(°C)
H	1.5 (±0.3)	≤6.0	35mm 40mm	2.0	0.30	Cu 漆包线 Cu Enameled Wires	7.5	1.5	7	-40~+150
I	1.9 (±0.4)	≤6.0	50mm 60mm	2.0		Cu 漆包线耐高压 Cu Enameled Wires High-Voltage resistant	10	2.0	10	

● 表3：高性能产品特殊可靠性指标一览表: Table of Special Reliability Indicators for High-Performance Products

产品代码 Part number	T1 (高温/高湿) T1 High Temperature/High Humidity	T2 (高温/高压) T2 High Temperature/High Voltage	T3 (高温/高湿/高压) T3 High Temperature/High Humidity/High Voltage
可靠性指标 Reliability indicators	高低温冲击 100次循环 (ΔR/R≤±5%, ΔB/B≤±1%) High-Low Temperature Shock 100 cycles  85°C/85%RH 1000h (ΔR/R≤±5%, ΔB/B≤±1%)  水煮试验 500h (ΔR/R≤±5%, ΔB/B≤±1%) Boiling Test, 500 hours  年漂移率ΔR/R≤±0.1% Annual Drift Rate ΔR/R≤±0.1%	1500VAC  高低温冲击 100次循环 (ΔR/R≤±5%, ΔB/B≤±1%) High-Low Temperature Shock 100 cycles  年漂移率ΔR/R≤±0.5% Annual Drift Rate ΔR/R≤±0.5%	1500VAC  高低温冲击 100次循环 (ΔR/R≤±5%, ΔB/B≤±1%) High-Low Temperature Shock 100 cycles  85°C/85%RH 1000h (ΔR/R≤±5%, ΔB/B≤±1%)  水煮试验 500h (ΔR/R≤±5%, ΔB/B≤±1%) Boiling Test, 500 hours  年漂移率ΔR/R≤±0.1% Annual Drift Rate ΔR/R≤±0.1%
工作温度范围: -40°C ~ +150°C, 短时间180°C Operating Temperature Range: -40°C to 150°C, short term up to 180°C			

技术性能指标、线径、线长可定制 (非标准制品总长: 12-245mm)

The technical performance indicators, wire diameter, and wire length can be customized (non-standard custom product total length: 12-245mm).