

MF51 单端 NTC 热敏电阻系列
MF51 single-ended NTC thermistor series

单端 NTC 热敏电阻是一种高耐热，高灵敏度的玻璃密封径向热敏电阻。尺寸更小，比传统的玻璃密封型更具响应性，可广泛用于各种应用。
The single-ended NTC thermistor is a highly heat-resistant, high-sensitivity glass-sealed radial thermistor. Smaller size, more responsive than traditional glass seals, and widely used in a variety of applications.



■ 用途 Use

空调设备，热水器，微波炉，各种家用电器家居设备，医疗，防灾，混合动力汽车，燃料电池汽车，各种汽车电气设备，安全设备，OA 设备，其他高温高速检测

Air conditioning equipment, water heaters, microwave ovens, various household appliances, home appliances, medical, disaster prevention, Hybrid vehicles, fuel cell vehicles, various automotive electrical equipment, safety equipment,

OA equipment, other high temperature and high speed testing equipment

■ 规格参数 Specifications

型号 Model	零负载电阻 ^{※1} Zero load resistance			规格温度 ^{°C} Specification temperature	B 值参数 ^{※2} B value parameter	精度偏差 Precision deviation	使用温度范围 ^{°C} Operating temperature range
	规格温度 Rating temperature	电阻值 Resistance	精度偏差 Precision deviation				
5K3510	25 ^{°C}	5K Ω	±1% ±2% ±3% ±5% ±T% ^{※3}	B25/85	3510	±1% ±2% ±3% ±5% ±T% ^{※3}	-40~300
10K3380/3435		10K Ω		B25/50	3380		
10K3470				B25/85	3435		
10K3950		B25/50		3470			
5.91K3820	85 ^{°C}	5.91K Ω		B25/85	3820		
50K3820	25 ^{°C}	50K Ω		B25/50	3950		
50K3950							
100K3950							
5.49K3950	106 ^{°C}	5.49K Ω			3990		
100K3990	25 ^{°C}	100K Ω			4150		
100K4150					4200		
100K4200					4250		
260K4250	200 ^{°C}	260K Ω	B100/200		4025		
1K4595						1K Ω	
6.6K4025						6.6K Ω	
3.4513K4300	114 ^{°C}	3.4513K Ω	B25/85		4300		
200K4325	25 ^{°C}	200 K Ω			4325		
3.485K3435	50 ^{°C}	3.485 K Ω		3435			

★上述为部分常规型号，不代表全部参数，可联系咨询。The above is a part of the regular model, does not represent all parameters, can contact us.

●耗散系数 Dissipation coefficient: $\approx 0.9\text{mW}/^{\circ}\text{C}$ ●热时间常数 Thermal time constant: $\leq 8\text{s}$ ●额定功率 Rated power: $\approx 2.7\text{mW}$ at 25^{°C}

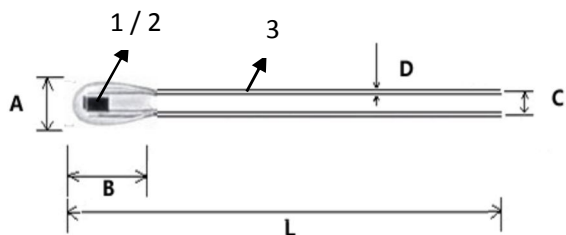
●耐电压 Withstand voltage: AC300V/1mA/60s ●绝缘阻抗 Insulation resistance: DC50V/50M Ω /60s

※1: 在指定温度下的零负载电阻 Zero load resistance at specified temperature.

※2: 根据指定温度下的零负载电阻计算 Calculated based on zero load resistance at the specified temperature.

※3: 定制特殊精度 Custom special precision

尺寸参数 Size parameters



1	2	3
芯片 Chip	玻壳 Glass bulb	CP 引线 CP lead

A	B	C	D	L ^{※4}
1.3±0.3	3±1	Max 0.6	0.22±0.05	65±5
1.6±0.3	4±1	Max 0.6	0.22±0.05	65±5

※4: L 尺寸可以剪短 L size can be cut short

性能 Performance

试验项目 Pilot projects	试验条件 Test conditions	标准 Standard
可焊性 Solderability	引线浸在 280±5℃ 的锡液里, 时间≥3 秒 The lead is immersed in a tin bath at 280 ± 5 ° C for ≥ 3 seconds	焊锡涂布面积在 80% 以上 Solder coating area is over 80%
耐焊性 Solder resistance	焊接热源距离电阻头 B 距离≥9MM, 280±20℃, 时间≤2 秒 The distance between the welding heat source and the resistance head B is ≥9MM, 280±20° C, time ≤2 seconds	ΔR≤±3% ΔB≤±1%
高温储存 High temperature storage	空气中 250±5℃ 放置 1000 小时 250±5° C in the air for 1000 hours	ΔR≤±3% ΔB≤±2%
低温储存 Low temperature storage	空气中 -10±5℃ 放置 1000 小时 1000 hours at -10 ± 5 ° C in the air	ΔR≤±3% ΔB≤±2%
冷热冲击 Thermal shock	-10±5℃/3 分钟 ↔ 100±5℃/3 分钟 循环 300 次 -10±5° C/3 minutes ↔ 100±5° C/3 minutes Cycle 300 times	ΔR≤±3% ΔB≤±1%
稳态湿热 Steady state damp heat	湿度 85±5%, 85±5℃ 放置 1000 小时 Humidity 85±5%, 85±5° C, 1000 hours	ΔR≤±3% ΔB≤±2%
跌落测试 Drop test	1 米高处自由跌落 3 次 Free fall 3 times at 1 meter height	无可见损伤 No visible damage ΔR≤±3% ΔB≤±1%
拉力测试 Pull test	固定电阻本体, 引线端水平逐渐施加 3N 的拉力, 3 秒 Fixed resistor body, the lead end level gradually applies 3N pulling force, 3 seconds	ΔR≤±3% ΔB≤±1%
弯曲测试 Bending test	电阻引脚弯曲 90 度, 恢复到初始位置, 反复 3 次 The resistance pin is bent 90 degrees and returns to the initial position, repeated 3 times.	ΔR≤±3% ΔB≤±1%
保存/期限 Save/term	(原包装状态) 避免阳光照射, 远离腐蚀、磁场环境 温度: -10 至 35℃ 湿度: 45% 至 75% 保存期: 1 年 (零负载) (Original packaging status) Avoid sunlight, away from corrosion, magnetic field environment, Temperature: -10 to 35 ° C Humidity: 45% to 75% Storage period: 1 year (zero load)	ΔR≤±1% ΔB≤±1%

注意事项 Precautions

■ 使用焊料连接引线时, 焊接距离玻璃封条末端 9 mm 或更远的距离。

When soldering the leads, solder the distance 9 mm or more from the end of the glass seal.

■ 处理引线时, 将其固定在距离玻璃密封端 9 毫米或更远的位置。When handling the leads, fix them 9 mm or more from the glass seal end.

■ 不可直接使用在潮湿环境下。Cannot be used directly in wet conditions.

■ 参考资料, 以产品最新技术承认书为准。Reference materials, subject to the latest technical recognition of the product.

■ 中英文有分歧, 以中文为准。There are differences between Chinese and English, whichever is Chinese.