

MF59系列 温度传感器

Series MF59 Temperature sensors

● 特点及用途 FEATURES&APPLICATIONS

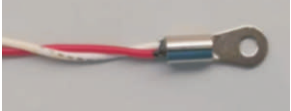
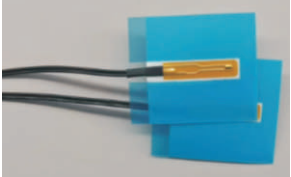
- ▶ MF59型温度传感器由过渡金属Mn、Cu、Fe、Co和Ni的氧化物制成，其半导体的阻值随温度变化而变化，具有响应速度快，测温精度高，互换性好，可靠性高等特点。广泛应用于空调、冰箱、电水壶、手机电池、电子台历、微波炉、电磁炉、自动温度探测仪、医用电子体温计、火灾报警等。其主要参数是常温阻值、B值、耗散系数、时间常数等。

Mf59 Series temperature sensors, manufactured from the oxide of the transition metals -Mn、Cu、Fe、Co and Ni. are temperature dependant semiconductor resistors. have quick temperature response、the virtue of high precision、good reliability and interchangeability and so on. It can be used in air-conditioner、refrigerator、electric water heater、mobile battery、electronic calendar、microwave oven、electromagnetic oven、auto temperature detector、medical apparatus、fire alarm,etc. The basic physical characteristics are the resistance value, B value, thermal dissipation coefficient, time constant etc.



● 外形结构 Structure

外形图 Outline drawing	尺寸 Dimensions	型号 Type	用途 Applications	性能特点 Performance characteristics
	材料：环氧封装 Material: epoxy encapsulation	MF59B Series	电动工具 Electric tools	工作温度 Operation temperature: -30~+180℃
	外壳：圆不锈钢 shell: round stainless steel Φ6*25或Φ6*30 引线lead wire: PVC, 线长length 50-1500mm 3266 24# or 28#	MF59F Series	空调、烘箱 air conditioning, oven	工作温度 Operation temperature: -40~+125℃
	外壳：圆铜头 shell: round copper Φ6*25或Φ6*30 引线lead wire: PVC, 线长length50-1500mm 2651 26#	MF59C Series	冰箱、冷库 Refrigerator, cold storage	工作温度 Operation temperature: -30~+105℃
	探头：黑色环氧树脂 sensor head: black epoxy resin MaxΦ7*18 引线lead wire: PVC, 线长length 20-1500mm 2468 20#	MF59B Series	空调、暖房 air conditioning, conservatory	工作温度 Operation temperature: -30~+105℃

	外壳：塑壳 shell: plastic shell $\Phi 7 \times 25$ 引线lead wire: PVC, 线长length 50~1500mm AVVR 2*0.2 105℃	MF59A Series	电冰箱、冰柜 refrigerator, freezer	工作温度 Operation temperature: -30~+90℃
	材料：不锈钢贴装 Material: stainless steel mouting 方头square: MF59D 5*12 圆头round: MF59E 5*12	MF59D Series MF59E Series	电源、CPU主板及可控硅等表面测温 Power supply, CPU main board and controlled silicon and other surface temperature measurement	工作温度 Operation temperature: -30~+105℃
	特殊结构的外形和线材 根据用户要求另行商定 The appearance of special structure and wire rod according to the customer requirements to be agreed	MF59G Series	热水器、干燥机、电磁炉、电加热器、汽车空调 Water heater, drying machine, electromagnetic oven, electric heater, automobile air conditioner	工作温度 Operation temperature: -30~+105℃ -40~+150℃
	材料：铜镀镍 Material: Copper nickel plating	MF59E Series	电梯 Elevator	工作温度 Operation temperature: -30~+105℃
	材料：铜镀镍 镍片 Material: Copper nickel plating nickel sheet	MF59E MF59D	新能源 New energy	工作温度 Operation temperature: -40~+150℃
	材料：瓷壳封装 Material: Ceramic shell packaging	MF59T	电力 Electric power	工作温度 Operation temperature: -40~+250℃
	材料：薄膜封装 Material: Thin film packaging	MF55	投影仪 Projector	工作温度 Operation temperature: -30~+105℃

● 型号命名 PRODUCT IDENTIFICATION

MF59 A 103 F 3380 F W
① ② ③ ④ ⑤ ⑥ ⑦

① 产品型号Product code

② 传感头尺寸代号Sensor head size code:

A—塑壳灌封Plastic encapsulation

B—树脂封装Resin package

C—铜头灌封copper head encapsulation

D—方头贴装Square head mounting

E—圆头贴装Round head mounting

F—不锈钢圆头灌封Stainless steel round head encapsulation

G—特殊结构Special structure

③ 25℃时零功率电阻值25℃ Zero power Resistance

④ 阻值允许误差The allowable tolerance of B constant: F— $\pm 1\%$ 、G— $\pm 2\%$ 、J— $\pm 5\%$;

⑤ B值B constant: B25/50 (如是B25/85, 需特别注明);

⑥ B值精度 B constant tolerance: F— $\pm 1\%$ 、G— $\pm 2\%$ 、H— $\pm 3\%$;

⑦ 引线种类lead wire type: W—白色white, B—黑色black, R—红色red, 等等etc。

● 技术说明 TECHNICAL SPECIFICATIONS

型号 Type	R_{25} F($\pm 1\%$);G($\pm 2\%$) H($\pm 3\%$);J($\pm 5\%$)	B值 F($\pm 1\%$);G($\pm 2\%$) H($\pm 3\%$)	耗散系数 δ Dissipation factor (mW/°C)	热时间常数 Thermal time constant τ (s)
Mf59□102□3470□□	1k Ω	3470k	4.5	50
MF59□502□3470□□	5k Ω	3470k	4.5	50
MF59□502□3650□□	5k Ω	3650k	4.5	50
MF59□502□3950□□	5k Ω	3950k	4.5	50
MF59□103□2200□□	10k Ω	2200k	4.5	50
MF59□103□3380□□	10k Ω	3380k	3.8	10
MF59□103□3950□□	10k Ω	3950k	3.8	10
MF59□103□4100□□	10k Ω	4100k	3.8	10
MF59□503□3950□□	50k Ω	3950k	3.8	10
MF59□104□4100□□	100k Ω	4100k	3.8	10
MF59□204□4500□□	200k Ω	4500k	3.8	10
Mf59□474□4600□□	470k Ω	4600k	3.8	10

注：MF59系列任一外形结构均可具有上述电器性能。

Note: Any structure of MF59 series can have the electrical properties of the above.