

### 负温度系数(NTC)热敏电阻器

### Negative Temperature Coefficient (NTC) Thermistor

#### CWF精密型NTC温度传感器系列

#### CWF Precision NTC Temperature Sensor Series

核心测温元件通过UL,CQC,TUV认证及AEC-Q200检测

The temperature-sensing component has obtained certifications from

UL, CQC, TUV and has passed AEC-Q200 testing

#### ● 应用范围 Applications

应用于储能、汽车、医疗、电动工具、家用电器、通讯信息、工业自动化等场合的温度测量与控制。

Used for temperature measurement and control in applications including energy storage, automotive systems, medical devices, power tools, household appliances, communication systems, and industrial automation.



江苏省高新技术产品

High-tech product in Jiangsu Province

#### ● 特点

- 采用全新工艺、产品性能稳定，可长期工作
- 电阻值和B值精度高、一致性好、可互换
- 灵敏度高、反应迅速
- 具有良好的绝缘密封性和抗机械碰撞、抗折弯能力、可靠性高

#### ● Features

- Advanced manufacturing processes ensure stable performance and long-term operation capability.
- High resistance and precise B-value accuracy, with excellent consistency and interchangeability.
- High sensitivity and fast response time.
- Superior insulation and sealing performance; strong resistance to mechanical impact and bending; high reliability.

#### ● 安规认证 Certifications

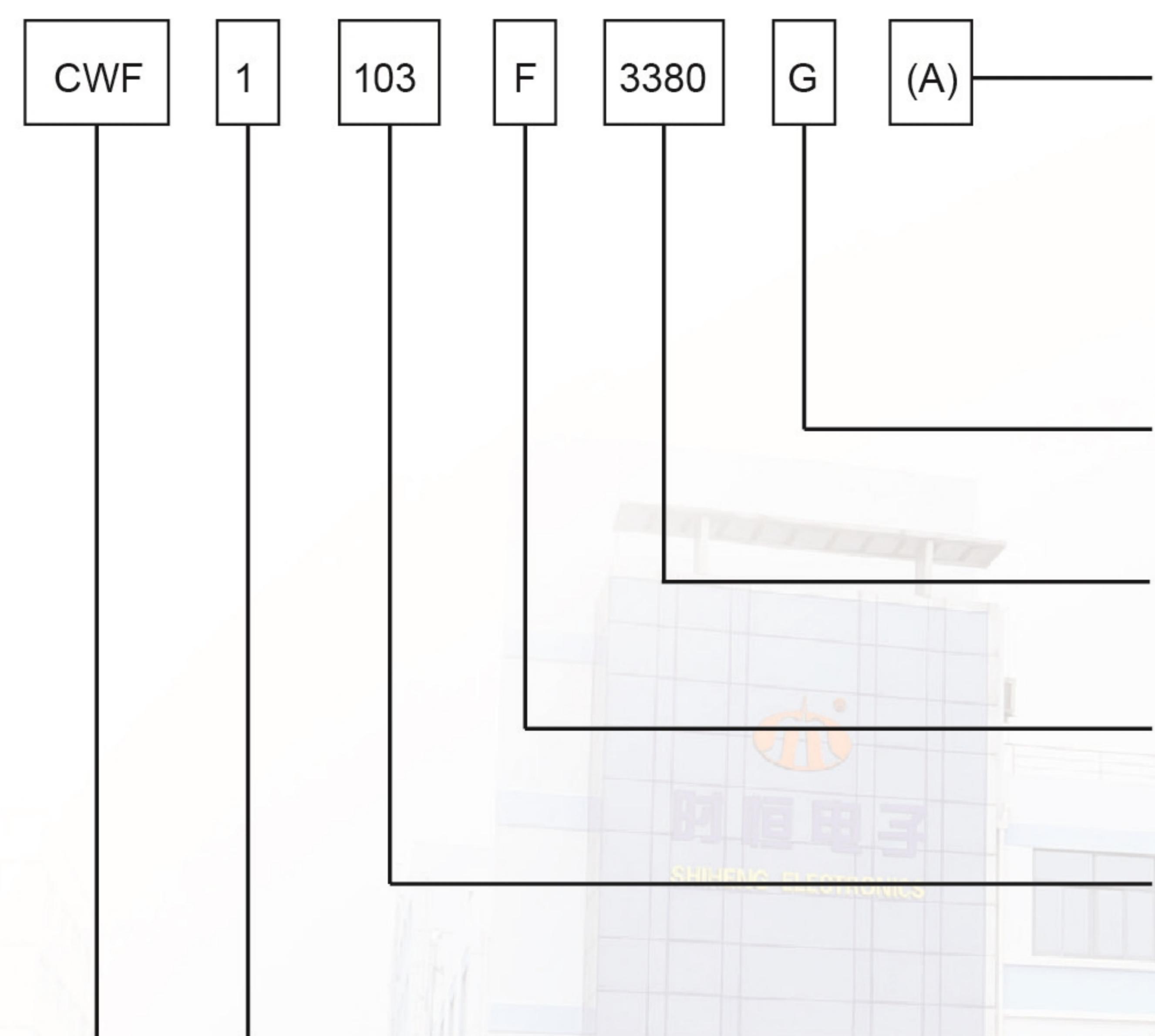


UL1434认证  
UL1434 Certification  
(File# E240991)



CQC 认证  
CQC Certification  
(File# 10001052282)

#### ● 产品标志说明 Marking Instruction



核心元件代码(NTC热敏电阻型号)

A-MF52A, B-MF58, C-芯片, D- MF51, E-MF51E/MF52B,  
F- MF11, G-MF55, H-MF52DE, I-CMF贴片、T-宽间距 MF51, J-其他  
Core Component Code (NTC Thermistor Type)  
A-MF52A, B-MF58, C-Chip, D- MF51, E-MF51E/MF52B,  
F- MF11, G-MF55, H-MF52DE, I-CMF SMT, T-Wide spacing MF51, J-Other

B值允许偏差代号 ( $\pm 1\%$ 时省略)

Allowable B Value Tolerance Code (Annotation omitted for  $\pm 1\%$ )  
E:  $\pm 0.5\%$  F:  $\pm 1\%$  G:  $\pm 2\%$

B值(25/50°C): 3380K

B Value (25/50°C): 3380K

阻值允许偏差代号: F:  $\pm 1\%$ , G:  $\pm 2\%$ , H:  $\pm 3\%$ , J:  $\pm 5\%$ , K:  $\pm 10\%$

Allowable Resistance Tolerance Code: F:  $\pm 1\%$ , G:  $\pm 2\%$ , H:  $\pm 3\%$ , J:  $\pm 5\%$ , K:  $\pm 10\%$

25°C的零功率电阻值: 103为10 kΩ

Zero-Power Resistance at 25°C: 103 indicates 10 kΩ

头部尺寸类别 The Head Categories

1-环氧包封	1-Epoxy encapsulation
2-铝壳、铜壳、不锈钢封装等	2-Aluminum, Copper Encapsulation, Stainless Steel Encapsulation
3-非金属封装	3-Non-metal Encapsulation
4-加固固定金属片	4-Embedded Metal Sheet
5-特殊封装	5-Special Encapsulation
6-注塑封装	6-Injection Molding Encapsulation
7-陶瓷圆柱形	7-Ceramic Cylinder
8-FPC软板结构	8-FPC Flexible Board Structure
9-医疗用微型封装	9-Microenvelope for medical use

精密型NTC温度传感器

CWF Precision NTC Temperature Sensor Series



## CWF精密型NTC温度传感器系列

### CWF Precision NTC Temperature Sensor Series

<p><b>CWF1 环氧包封</b> CWF1 Epoxy Encapsulation</p> <p>Diagram showing the physical appearance and dimensions of the CWF1 sensor. It consists of a cylindrical epoxy resin body with a lead wire extending from one end and a tin-coated tail from the other. Dimensions: D (outer diameter), L1 (body length), L2 (lead wire length). Labels: 环氧树脂 (Epoxy Resin), 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: D, L1, and L2 to be specified by the user.</p>	<p><b>CWF2 铝壳、铜壳、不锈钢壳封装</b> CWF2 Aluminum, Copper, Stainless Steel Encapsulation</p> <p>Diagram showing the physical appearance and dimensions of the CWF2 sensor. It has a cylindrical metal casing (Aluminum, Copper, or Stainless Steel) with a lead wire extending from one end and a tin-coated tail from the other. Dimensions: D (outer diameter), L1 (body length), L2 (lead wire length). Labels: 铝、紫铜、不锈钢壳等 (Aluminum, Copper, Stainless Steel Casings, etc.), 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: D, L1, and L2 to be specified by the user.</p>
<p><b>CWF3 非金属封装</b> CWF3 Non-metal Encapsulation</p> <p>Diagram showing the physical appearance and dimensions of the CWF3 sensor. It has a cylindrical non-metallic body with a lead wire extending from one end and a tin-coated tail from the other. Dimensions: 6.5±0.1 (body diameter), 20±1 (body length), L2 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>	<p><b>CWF4 加固定金属片</b> CWF4 Embedded Metal Sheet</p> <p>Diagram showing the physical appearance and dimensions of the CWF4 sensor. It has a cylindrical body with a lead wire extending from one end and a tin-coated tail from the other. A metal sheet is embedded in the body. Dimensions: Φ7.2±0.2 (body diameter), Φ3.5 (metal sheet diameter), 6.8±0.3 (metal sheet thickness), 12.7±0.8 (metal sheet length), L2 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>
<p><b>CWF5 加特殊封装</b> CWF5 Special Encapsulation</p> <p>Diagram showing the physical appearance and dimensions of the CWF5 sensor. It has a cylindrical body with a lead wire extending from one end and a tin-coated tail from the other. A special connector is attached to the lead wire. Dimensions: 8 (body diameter), 8±0.3 (body length), 16±0.5 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>	<p>Diagram showing the physical appearance and dimensions of the CWF5 sensor. It has a cylindrical body with a lead wire extending from one end and a tin-coated tail from the other. A special connector is attached to the lead wire. Dimensions: 12±5 (body diameter), 50±5 (body length), L2 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>
<p><b>CWF6 注塑封装</b> CWF6 Injection Molding Encapsulation</p> <p>Diagram showing the physical appearance and dimensions of the CWF6 sensor. It has a cylindrical body with a lead wire extending from one end and a tin-coated tail from the other. A plastic connector is attached to the lead wire. Dimensions: 6.5±0.1 (body diameter), 20±1 (body length), L2 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>	<p><b>CWF7 陶瓷圆柱形</b> CWF7 Ceramic Cylinder</p> <p>Diagram showing the physical appearance and dimensions of the CWF7 sensor. It has a cylindrical ceramic body with a lead wire extending from one end and a tin-coated tail from the other. Dimensions: D (outer diameter), L1 (body length), L2 (lead wire length). Labels: 导线 Wire (Wire). Note: D, L1, L2 to be specified by the user.</p>
<p><b>CWF8 FPC软板结构</b> CWF8 FPC Flexible Board</p> <p>Diagram showing the physical appearance and dimensions of the CWF8 sensor. It has a flexible FPC board with a lead wire extending from one end and a tin-coated tail from the other. Dimensions: L2 (lead wire length). Labels: 导线 Wire (Wire), 尾部上锡 (Tin-Coated Tail). Note: L2 to be specified by the user.</p>	<p><b>CWF9 医疗用微型封装</b> CWF9 Microenvelope for Medical Use</p> <p>Diagram showing the physical appearance and dimensions of the CWF9 sensor. It has a small, compact envelope made of double-row nickel alloy enameled wire. Dimensions: Max0.35 (width), Max2 (length), Max0.5 (height), Max2.3 (depth). Labels: 聚酰亚胺 (Polyimide), 双排镍合金漆包线 (Double-Row Nickel Alloy Enamelled Wire), 导线 Wire (Wire). Note: L2 to be specified by the user.</p>