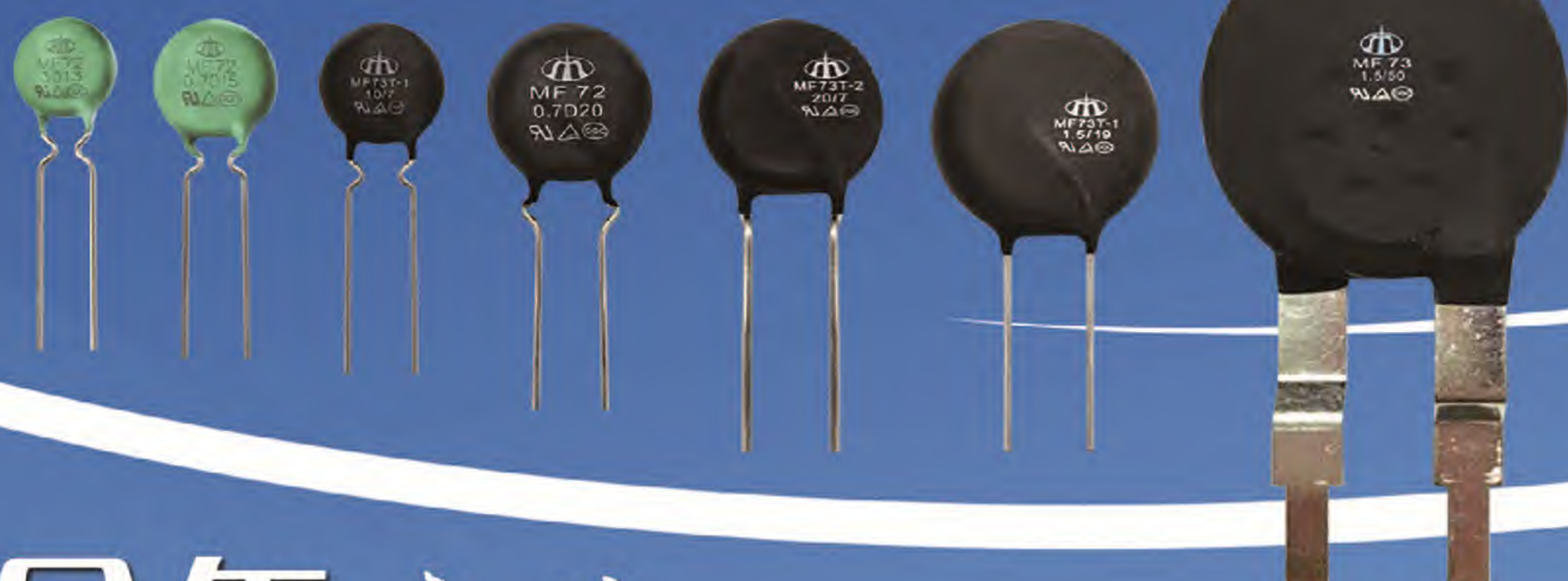




20余年专注

Over 20 Years of Expertise and Innovation

产品均符合"RoHS"标准

All Products Comply with RoHS Standards

NTC 热敏电阻器

NTC Thermistors

NTC 温度传感器

NTC Temperature Sensors

国家级专精特新小巨人企业

Recognized as a National-Level Specialized and Innovative Enterprise



南京时恒电子科技有限公司

Nanjing Shiheng Electronics Technology Co., Ltd.



南京时恒电子科技有限公司位于江苏省南京市江宁区，为“国家高新技术企业”、“国家级专精特新小巨人企业”、“南京市优秀民营企业”。公司专业研发、生产、销售全系列NTC热敏电阻器、NTC温度传感器、Pt铂电阻温度传感器、PTC热敏电阻器和氧化锌压敏电阻器等敏感元器件，其中NTC热敏电阻器系列产品涵盖了浪涌抑制、温度补偿、精密测温、温度控制等应用，是国内专业生产NTC热敏电阻器及其温度传感器的骨干企业。公司建有“江苏省NTC热敏陶瓷材料工程技术研究中心”，具有很强的研发实力。

公司通过了ISO9001质量管理体系认证、IATF16949汽车行业质量管理体系、ISO14001环境管理体系认证、GB/T29490知识产权合规管理体系认证，为AAA信用等级企业，注册商标为“江苏省著名商标”，产品被南京市人民政府授予“南京名牌产品”称号。公司牵头起草制定了《用于抑制浪涌电流的MF72普通功率型负温度系数热敏电阻器》团体标准，参与了国家“十三五”、“十四五”规划的起草。

公司凭借独特工艺和专利技术，生产的产品具有高精度、高可靠性、高稳定性等突出优势和显著特点，处于行业领先水平，主要产品均通过了UL、CUL、TUV、CQC等认证，测温型产品通过了AEC-Q200检测。公司紧跟国际发展动态，不断研发出具有国际先进水平的新产品，多项科技项目获得包括国家火炬计划、国家科技部创新基金在内的各级政府的立项和资助。公司高品质的产品深受用户的青睐，产品广泛应用于工业电子设备、通讯、电力交通、医疗设备、汽车电子、家用电器、测试仪器、电源设备、智能家居、绿色能源、绿色农业、节能环保及军工等领域，产品远销东南亚、欧洲、北美等国际市场。

Company Overview / 公司介绍

Located in Nanjing, China, Nanjing Shiheng Electronics Technology Co., Ltd. specializes in the research, development, manufacturing, and supply of high-performance electronic components. With over 20 years of expertise, we offer a comprehensive portfolio including NTC thermistors, NTC temperature sensors, platinum resistance temperature sensors, PTC thermistors, and zinc oxide varistors. Our solutions support diverse applications such as inrush current limiting, temperature compensation, and precision temperature measurement, making us a trusted partner across industries worldwide.

Driven by a strong commitment to innovation, our R&D capabilities and technical leadership set us apart. We are certified to ISO9001, IATF16949, ISO14001, and GB/T 29490 standards and maintain a national AAA credit rating. Shiheng Electronics has contributed to the development of key industry standards, including specifications for inrush current limiter NTC thermistors, reinforcing our leadership in sensitive component technology.

Our manufacturing integrates advanced production technologies and patented innovations, delivering outstanding product precision, reliability, and stability. Our major products are certified by UL, cUL, TÜV, and CQC, and comply with RoHS environmental standards, ensuring both safety and sustainability. Our temperature measurement series also meets the AEC-Q200 standard for automotive-grade reliability.

Today, Shiheng Electronics empowers global industries with advanced solutions across industrial electronics, energy storage systems, medical devices, automotive electronics, electric vehicles, communications, power transportation, smart homes, green energy, sustainable agriculture, and environmental protection. With a strong presence across Southeast Asia, Europe, and North America, we continue to meet the evolving needs of the international market through technological excellence and customer-centric solutions.

公司高水平的研发机构

--江苏省NTC热敏陶瓷材料工程技术研究中心

研究中心面积共 2000 平方米, 各种试验仪器设备 50 多台 / 套, 具有对热敏陶瓷材料进行全流程检测、分析、试验的能力和手段。是国内 NTC 热敏陶瓷材料高水准的研发平台和国内具有较大影响的专业人才实习、培训、科研基地。

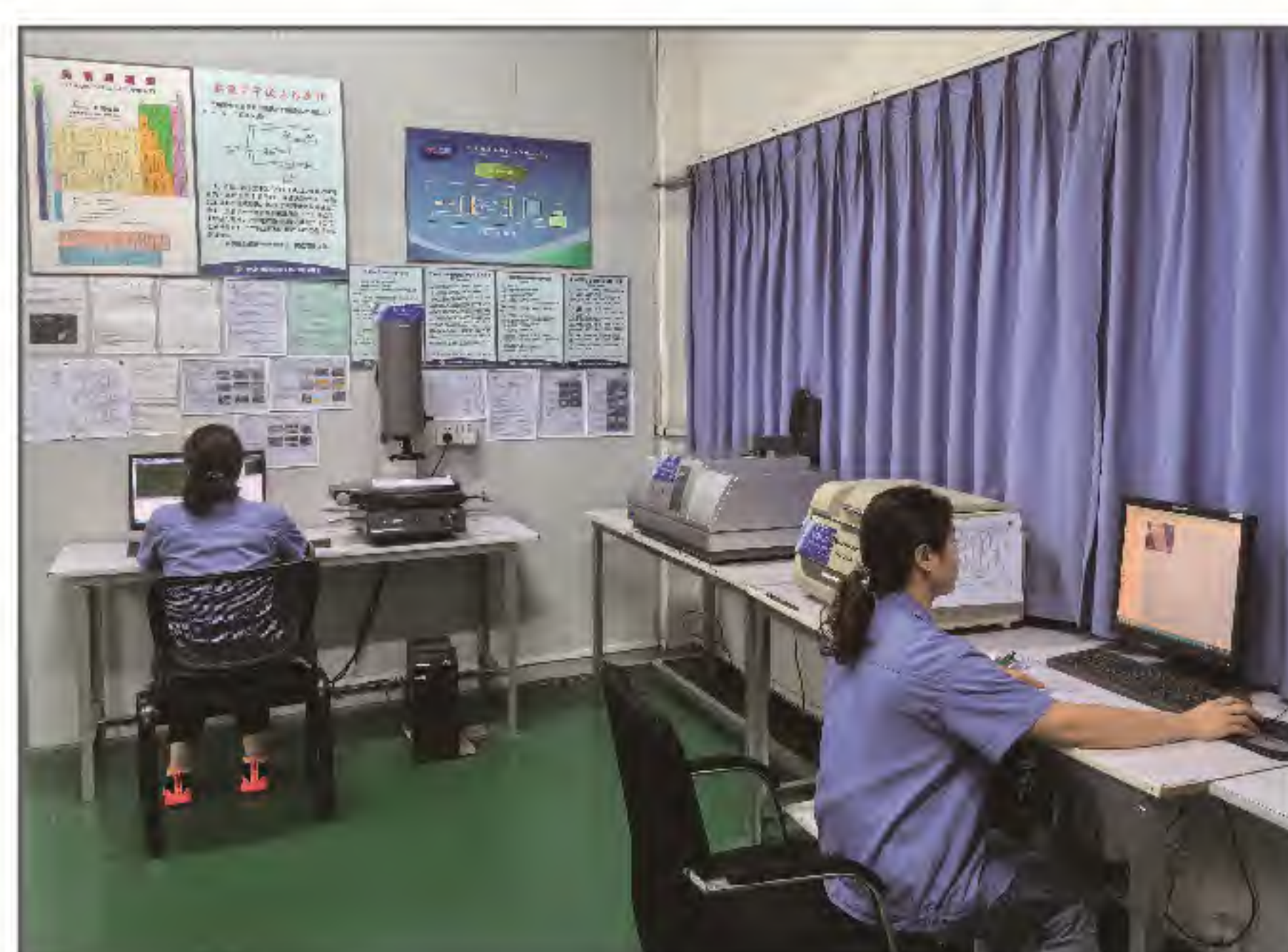
中心的研发团队采用新的试验方法和研发手段, 取得了一系列工艺技术突破和具有自主知识产权的核心技术, 一大批技术成果应用到生产实践中, 大大推动了企业的技术进步。

Leading Research and Development Center

— Jiangsu Provincial NTC Thermistor Ceramic Materials Engineering Research Center

Covering 22,000 square feet and equipped with over 50 sets of advanced experimental tools, our research center specializes in comprehensive testing, analysis, and development of thermistor ceramic materials. Recognized as a leading R&D institution for thermistor technology, the center plays a key role in cultivating professional talent and advancing scientific innovation.

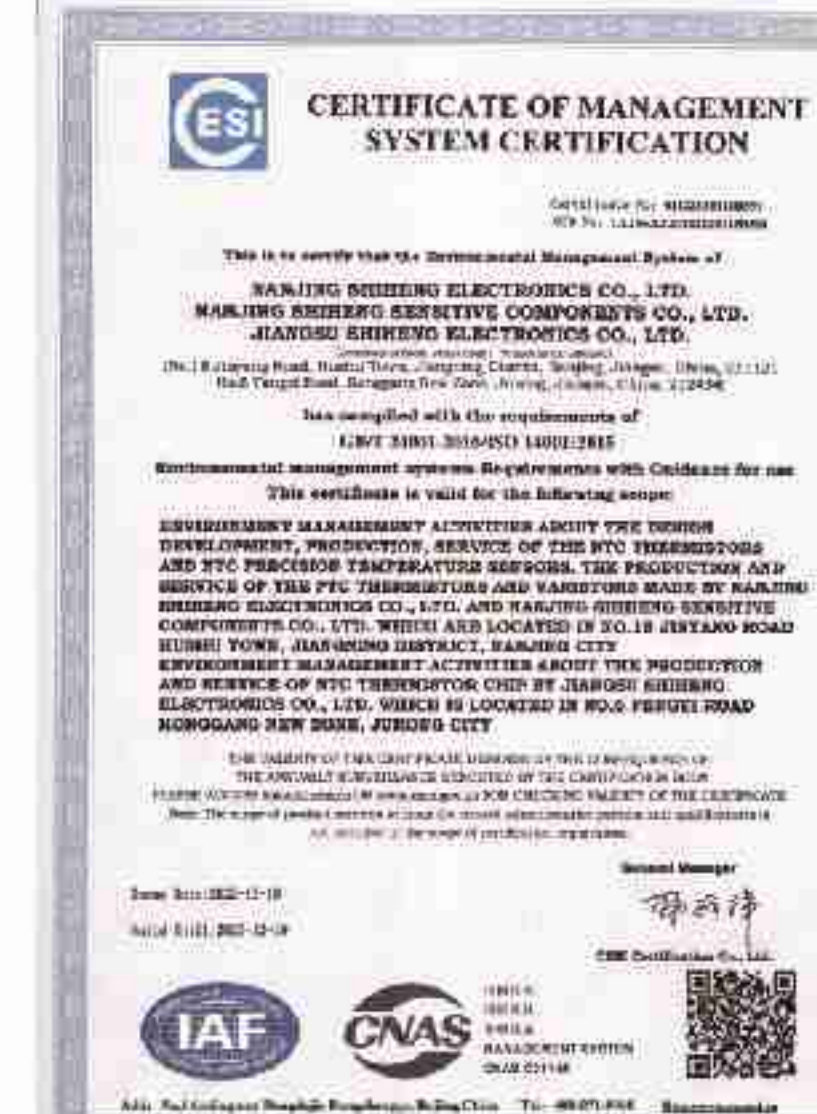
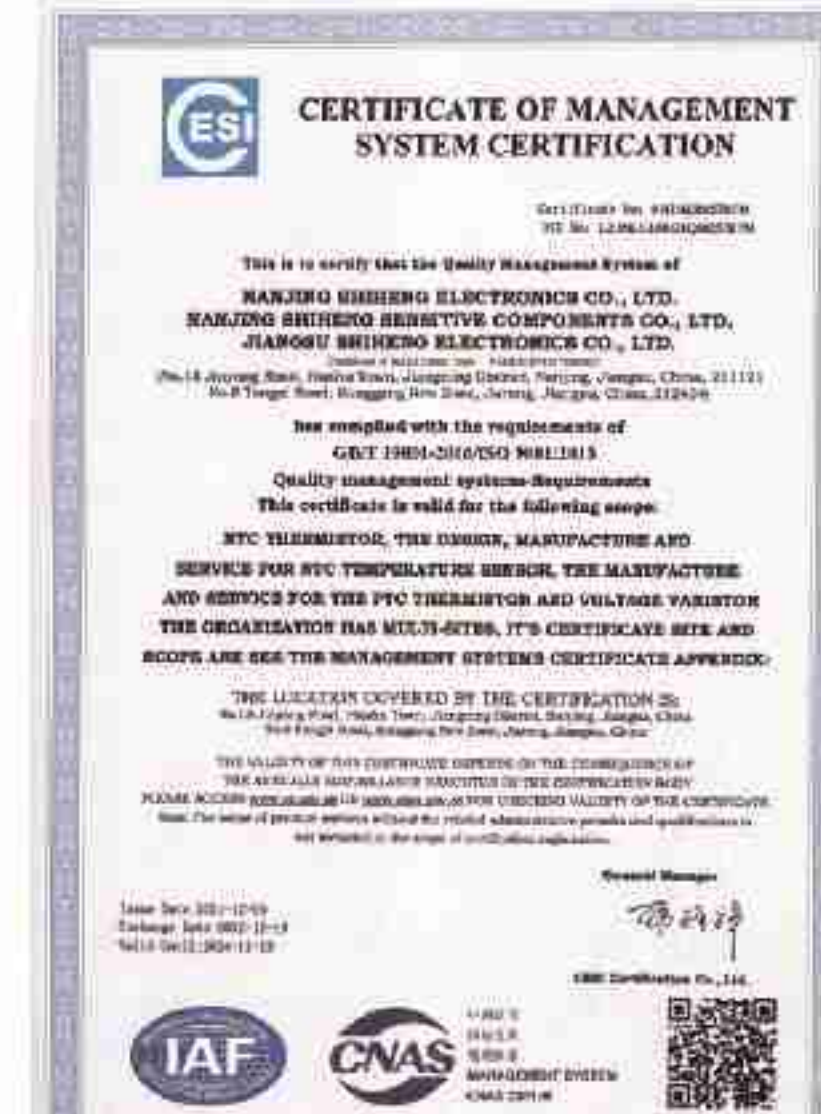
Our R&D team employs state-of-the-art testing methods and innovative research techniques to drive technological breakthroughs and strengthen our portfolio of proprietary technologies. These advancements are seamlessly integrated into our manufacturing processes, elevating product performance and reinforcing our industry leadership.



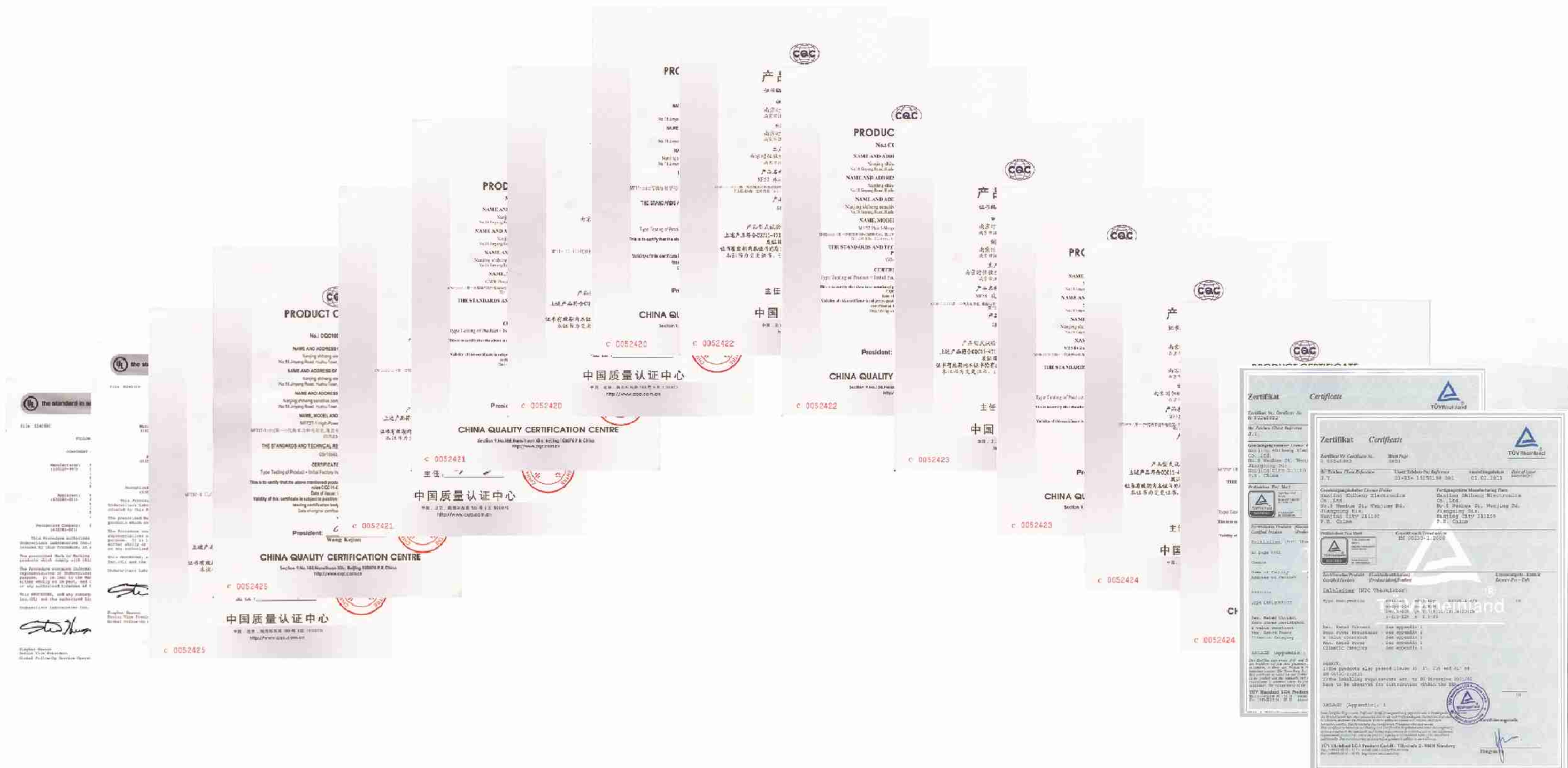
Qualification / 公司资质



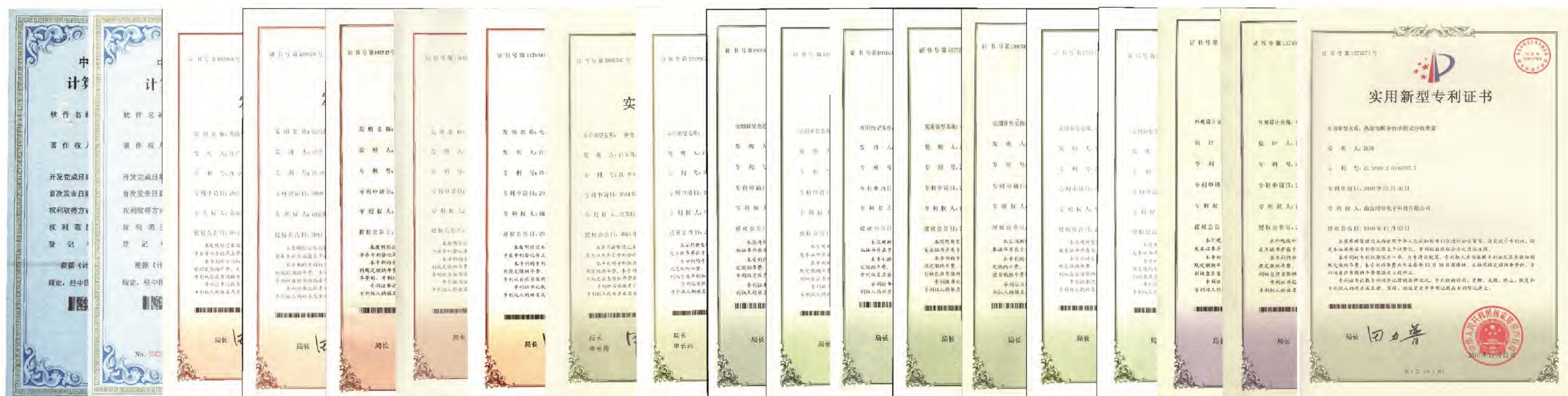
体系认证 System Certification



产品认证 Product Certification



Patents and R&D Achievements / 专利及科研成果



功率型 Inrush Current Limiters	■ MF72功率型NTC热敏电阻器系列 3 MF72 Series NTC Thermistor for Inrush Current Limiting ■ MF73T大功率型NTC热敏电阻器系列 8 MF73T Series NTC Thermistor for High-Power Inrush Current Limiting ■ MF73超大功率型NTC热敏电阻器系列 19 MF73 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting ■ MF74超大功率型NTC热敏电阻器系列 22 MF74 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting ■ MF75超大功率型NTC热敏电阻器系列 23 MF75 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting
补偿型 Compensation-Type	■ MF11补偿型NTC热敏电阻器系列 25 MF11 Series Compensation-Type NTC Thermistor
测温型 Temperature- Measurement Type	■ MF51E测温型（电子体温计专用）NTC热敏电阻器系列 27 MF51E Series Temperature-Measurement NTC Thermistor for Electronic Thermometers ■ MF52珠状测温型NTC热敏电阻器系列 29 MF52 Series Bead-Type Temperature Measurement NTC Thermistors ■ MF52B测温型NTC热敏电阻器（可定制）系列 31 MF52B Series Temperatures Measurement NTC Thermistor (Customizable) ■ MF54塑封测温型NTC热敏电阻系列 33 MF54 Series Plastic-Encapsulated Temperature-Measurement NTC Thermistor ■ MF55薄膜测温型NTC热敏电阻器系列 34 MF55 Series Thin Film Temperature-Measurement NTC Thermistor ■ MF57（汽车电子专用）测温型NTC热敏电阻器系列 35 MF57 Series (Automotive Electronics-Specific) Temperature-Measurement NTC Thermistor ■ MF51玻封测温型NTC热敏电阻器系列 36 MF51 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor ■ MF58玻封测温型NTC热敏电阻器系列 38 MF58 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor ■ MF59玻封片式NTC热敏电阻系列 40 MF59 Series Glass-Encapsulated Chip NTC Thermistor
温度传感器 Temperature Sensors	■ CWF精密型NTC温度传感器系列 41 CWF Precision NTC Temperature Sensor Series ■ Pt100、Pt1000铂电阻及其温度传感器系列 43 Pt100/Pt1000 Platium RTDs and Temperature Sensors
片式 Chip-Type	■ 热敏电阻蓝膜芯片系列 44 Blue Film Chip Thermistor Series ■ CMF片式NTC热敏电阻器系列 46 CMF Chip NTC Thermistor Series
PTC热敏电阻器 PTC Thermistors	■ PPTC高分子正温系数热敏电阻器系列 48 PPTC (Polymeric Positive Temperature Coefficient) Thermistor Series ■ MZ11A型灯丝预热用PTC热敏电阻器系列 49 MZ11A Series PTC Thermistors for Filament Preheating
压敏电阻 Varistors	■ MYG过压保护型压敏电阻器系列 51 MYG Series Overvoltage Protection Varistor

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF72功率型NTC热敏电阻器系列

MF72 Series NTC Thermistor for Inrush Current Limiting

● 特点

- 体积小、功率大，抑制浪涌电流能力强
- 反应速度快
- 材料常数 (B值) 大，残余电阻小
- 寿命长，可靠性高
- 系列全，应用范围宽

● 应用范围

- 转换电源，开关电源，UPS电源
- 电子节能灯，镇流器及各类加热器
- 各类显示器
- 白炽灯，其它照明灯具

● 安规认证 Certifications



UL1434 认证
UL1434 Certification
(File# E241319)



CQC认证
CQC Certification
(File# 04001010556)



TUV认证
TUV Certification
(File# R50245892)

● Features

- Compact size, high power, and excellent surge current suppression.
- Fast response time.
- High material constant (B value), and low residual resistance.
- Extended operational life and high reliability.
- Full range series and versatile applications.

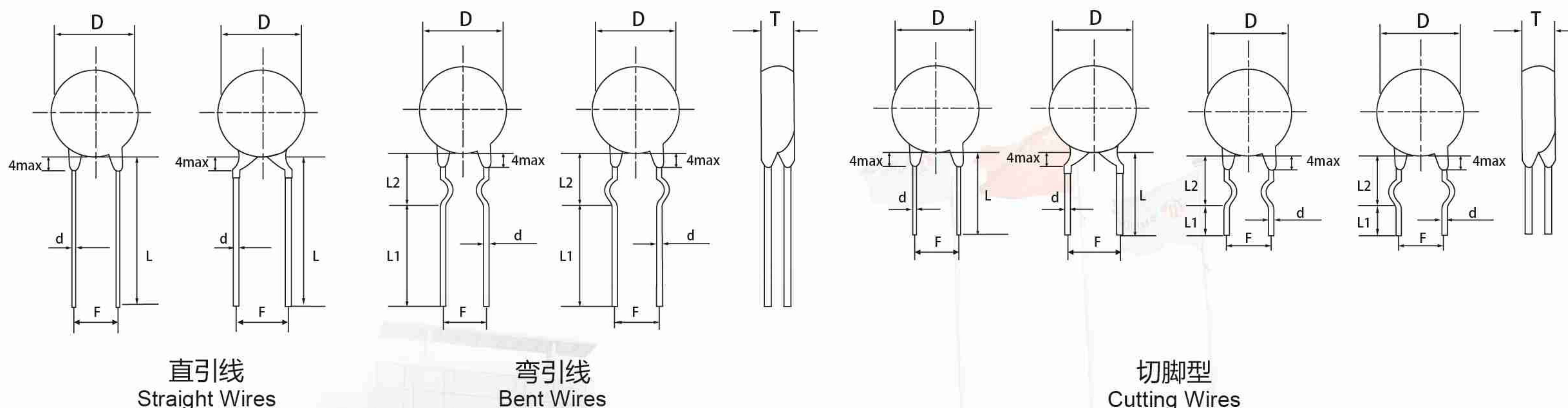
● Applications

- Converters, switching power supplies, and UPS systems.
- Electronic energy-saving lamps, ballasts, and various electric heaters.
- Various displays.
- Incandescent lamps and other lighting fixtures.

● 产品标志说明 Marking Instruction



● 外形尺寸 Dimensions (mm)



尺寸 Dim. (mm) 代号 Code 型号 Part No.	Dmax	Tmax	d±0.05	F±0.5	Lmin	弯引线 Bent Wires	
						L1min	L2±2
MF72 □D3	4.5	4.5	0.45	2.5	25	20/5	5
MF72 □D5	6.0	5	0.6/0.45	5/2.5	25	20/5	5
MF72 □D7	8.0	5	0.6	5	25	20/5	5
MF72 □D9	10.0	5.5	0.8/0.6	7.5/5	25	20/5	5
MF72 □D11	12.0	5.5	0.8	7.5/5	25	20/5	5
MF72 □D13	14.0	6	0.8	7.5/5.0	25	20/5	5
MF72 □D15	16.0	6	0.8	10/7.5	25	20/5	5
MF72 □D20	21.0	7	1.0	10/7.5	25	/	/
MF72 □D25	27.5	8	1.0	10/7.5	25	/	/

MF72功率型NTC热敏电阻器系列

MF72 Series NTC Thermistor for Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D9~D11mm: -40~+170°C D13~D25mm: -40~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		I _{max} (A)	R _I max (Ω)	δ (mW/°C)	τ (s)	(μF)	CQC	TUV	UL/CUL
MF72 0.7D3	0.7	1	0.112	5	15	47			
MF72 1D3	1	0.9	0.13	5	15	47			
MF72 1.5D3	1.5	0.9	0.158	5	15	47			
MF72 2.5D3	2.5	0.7	0.22	5	15	47			
MF72 5D3	5	0.5	0.45	5	15	47			
MF72 0.7D5	0.7	2	0.1	6	20	100	√	√	
MF72 1D5	1	1.8	0.115	6	20	100	√	√	
MF72 1.5D5	1.5	1.8	0.13	6	20	100	√	√	√
MF72 2D5	2	1.5	0.15	6	20	100	√	√	
MF72 2.5D5	2.5	1.5	0.17	6	20	100	√	√	
MF72 3D5	3	1.5	0.19	6	20	100	√	√	√
MF72 3.3D5	3.3	1.5	0.202	6	20	100	√	√	
MF72 3.5D5	3.5	1.5	0.215	6	20	100	√	√	
MF72 4D5	4	1.2	0.252	6	20	100	√	√	
MF72 5D5	5	1	0.353	6	20	100	√	√	√
MF72 7D5	7	0.8	0.575	6	20	100	√	√	
MF72 8D5	8	0.8	0.675	6	20	100	√	√	√
MF72 10D5	10	0.7	0.771	6	20	100	√	√	√
MF72 12D5	12	0.7	0.845	6	20	100	√	√	
MF72 15D5	15	0.6	1.102	6	20	100	√	√	
MF72 16D5	16	0.6	1.198	6	20	100	√	√	√
MF72 20D5	20	0.5	1.253	6	20	100	√	√	√
MF72 22D5	22	0.5	1.273	6	20	100	√	√	
MF72 30D5	30	0.4	1.304	6	20	47	√	√	
MF72 33D5	33	0.4	1.324	6	20	47	√	√	
MF72 36D5	36	0.4	1.394	6	20	47	√	√	
MF72 45D5	45	0.4	1.528	6	18	47	√	√	
MF72 47D5	47	0.4	1.625	6	18	47	√	√	
MF72 50D5	50	0.4	1.658	6	18	47	√	√	
MF72 60D5	60	0.3	1.878	6	18	47	√	√	
MF72 100D5	100	0.3	2.852	6	18	47	√	√	
MF72 200D5	200	0.1	6.259	6	18	47	√	√	√
MF72 220D5	220	0.1	6.859	6	18	47	√	√	
MF72 300D5	300	0.08	10.321	6	18	47	√	√	
MF72 0.7D7	0.7	2.2	0.082	10	30	150	√	√	
MF72 1D7	1	2.2	0.12	10	30	150	√	√	√
MF72 1.5D7	1.5	2.2	0.16	10	30	150	√	√	√
MF72 2.5D7	2.5	2	0.19	10	30	150	√	√	√
MF72 3D7	3	2	0.218	10	30	150	√	√	√
MF72 4.7D7	4.7	2	0.27	10	30	150	√	√	√
MF72 5D7	5	2	0.283	10	30	150	√	√	√
MF72 7D7	7	1	0.483	9	28	100	√	√	
MF72 8D7	8	1	0.539	9	28	100	√	√	√
MF72 10D7	10	1	0.616	9	27	100	√	√	√
MF72 12D7	12	1	0.816	9	27	100	√	√	
MF72 15D7	15	0.7	1.003	9	27	68	√	√	
MF72 16D7	16	0.7	1.003	9	27	68	√	√	√
MF72 20D7	20	0.6	1.102	9	27	68	√	√	√
MF72 22D7	22	0.6	1.108	9	27	68	√	√	√
MF72 30D7	30	0.6	1.128	9	27	68	√	√	
MF72 33D7	33	0.5	1.485	10	28	68	√	√	√
MF72 50D7	50	0.5	1.653	10	28	68	√	√	√
MF72 60D7	60	0.4	1.728	11	28	68	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF72功率型NTC热敏电阻器系列

MF72 Series NTC Thermistor for Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D9~D11mm: -40~+170°C D13~D25mm: -40~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		I _{max} (A)	R _I max (Ω)	δ (mW/°C)	τ (s)	(μF)	CQC	TUV	UL/CUL
MF72 85D7	85	0.4	2.536	11	28	68	√	√	
MF72 100D7	100	0.4	2.983	11	28	68	√	√	√
MF72 150D7	150	0.3	11.65	11	28	68	√	√	
MF72 200D7	200	0.2	11.65	11	28	68	√	√	√
MF72 0.7D9	0.7	4.8	0.062	11	35	220	√	√	
MF72 1D9	1	4.5	0.073	11	35	220	√	√	
MF72 1.5D9	1.5	4.5	0.082	11	35	220	√	√	√
MF72 2.5D9	2.5	4	0.113	11	35	220	√	√	√
MF72 3D9	3	4	0.12	11	35	220	√	√	√
MF72 4D9	4	3	0.19	11	35	220	√	√	√
MF72 5D9	5	3	0.21	11	34	220	√	√	√
MF72 6D9	6	2	0.315	11	34	150	√	√	√
MF72 7D9	7	2	0.345	11	34	150	√	√	
MF72 8D9	8	2	0.4	11	32	150	√	√	√
MF72 10D9	10	2	0.458	11	32	150	√	√	√
MF72 12D9	12	1	0.652	11	32	150	√	√	√
MF72 15D9	15	1	0.752	11	31	150	√	√	
MF72 16D9	16	1	0.802	11	31	150	√	√	√
MF72 20D9	20	1	0.864	11	30	150	√	√	√
MF72 22D9	22	1	0.95	11	30	150	√	√	√
MF72 25D9	25	1	0.98	11	30	150	√	√	
MF72 30D9	30	1	1.022	11	30	150	√	√	√
MF72 33D9	33	1	1.124	11	30	150	√	√	√
MF72 47D9	47	1	1.25	11	30	150	√	√	
MF72 50D9	50	1	1.252	11	30	150	√	√	√
MF72 60D9	60	0.8	1.502	11	31	150	√	√	√
MF72 80D9	80	0.8	2.01	11	30	68	√	√	√
MF72 120D9	120	0.8	3.015	11	30	68	√	√	√
MF72 200D9	200	0.5	5.007	11	32	47	√	√	√
MF72 220D9	220	0.5	5.55	11	32	47	√	√	
MF72 300D9	300	0.3	15.55	11	32	47	√	√	
MF72 400D9	400	0.2	30.3	11	32	47	√	√	√
MF72 0.7D11	0.7	5.5	0.04	13	43	470	√	√	
MF72 1D11	1	5	0.052	13	43	470	√	√	√
MF72 1.3D11	1.3	5	0.06	13	43	470	√	√	
MF72 1.5D11	1.5	5	0.065	13	43	470	√	√	√
MF72 2D11	2	5	0.085	13	43	470	√	√	
MF72 2.5D11	2.5	5	0.095	13	43	470	√	√	√
MF72 3D11	3	5	0.1	13	43	470	√	√	√
MF72 4D11	4	4	0.15	13	44	330	√	√	√
MF72 4.7D11	4.7	4	0.155	13	44	330	√	√	
MF72 5D11	5	4	0.156	13	45	330	√	√	√
MF72 6D11	6	3	0.24	13	45	220	√	√	√
MF72 6.8D11	6.8	3	0.245	13	45	220	√	√	
MF72 7D11	7	3	0.25	13	45	220	√	√	√
MF72 8D11	8	3	0.255	14	47	220	√	√	√
MF72 10D11	10	3	0.275	14	47	220	√	√	√
MF72 12D11	12	2	0.462	14	48	220	√	√	√
MF72 13D11	13	2	0.465	14	50	220	√	√	
MF72 15D11	15	2	0.468	14	50	220	√	√	
MF72 16D11	16	2	0.47	14	50	220	√	√	√
MF72 20D11	20	2	0.512	15	52	220	√	√	√
MF72 22D11	22	2	0.563	15	52	220	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF72功率型NTC热敏电阻器系列

MF72 Series NTC Thermistor for Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D9~D11mm: -40~+170°C D13~D25mm: -40~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		I _{max} (A)	R _{Imax} (Ω)	δ (mW/°C)	τ (s)	(μF)	CQC	TUV	UL/CUL
MF72 25D11	25	2	0.623	15	52	220	√	√	
MF72 30D11	30	1.5	0.667	15	52	220	√	√	√
MF72 33D11	33	1.5	0.734	15	52	220	√	√	√
MF72 47D11	47	1.5	1.002	15	52	220	√	√	
MF72 50D11	50	1.5	1.021	15	52	220	√	√	√
MF72 60D11	60	1.5	1.215	15	52	220	√	√	√
MF72 80D11	80	1.2	1.656	15	52	150	√	√	√
MF72 100D11	100	1.1	2.053	15	50	150	√	√	√
MF72 120D11	120	1.1	2.253	15	50	150	√	√	
MF72 150D11	150	1	3.121	15	50	150	√	√	
MF72 200D11	200	1	4.121	13	50	150	√	√	
MF72 400D11	400	0.5	9.252	13	50	100	√	√	
MF72 0.7D13	0.7	7.5	0.045	13	60	560	√	√	
MF72 1D13	1	7	0.052	13	60	560	√	√	
MF72 1.3D13	1.3	7	0.062	13	60	560	√	√	√
MF72 1.5D13	1.5	7	0.073	13	60	560	√	√	√
MF72 2.5D13	2.5	6	0.088	13	60	560	√	√	√
MF72 3D13	3	6	0.092	14	60	560	√	√	√
MF72 4D13	4	5	0.12	15	67	560	√	√	√
MF72 5D13	5	5	0.125	15	68	560	√	√	√
MF72 6D13	6	4	0.17	15	65	330	√	√	√
MF72 7D13	7	4	0.188	15	65	330	√	√	√
MF72 8D13	8	4	0.194	15	60	330	√	√	√
MF72 10D13	10	4	0.206	15	65	330	√	√	√
MF72 12D13	12	3	0.316	16	65	330	√	√	√
MF72 15D13	15	3	0.335	16	60	330	√	√	√
MF72 16D13	16	3	0.338	16	60	330	√	√	√
MF72 18D13	18	3	0.356	16	60	330	√	√	
MF72 20D13	20	3	0.372	16	65	330	√	√	√
MF72 22D13	22	2.5	0.405	16	65	330	√	√	
MF72 25D13	25	2.5	0.422	16	65	330	√	√	
MF72 30D13	30	2.5	0.517	16	65	330	√	√	√
MF72 33D13	33	2.5	0.592	16	65	330	√	√	
MF72 47D13	47	2	0.81	17	65	220	√	√	√
MF72 60D13	60	1.8	1.012	17	65	220	√	√	
MF72 80D13	80	1.5	1.423	17	65	220	√	√	
MF72 100D13	100	1.2	1.823	17	65	220	√	√	
MF72 120D13	120	1.2	2.124	17	65	220	√	√	√
MF72 0.5D15	0.5	9	0.03	18	68	680	√	√	
MF72 0.7D15	0.7	9	0.035	18	68	680	√	√	√
MF72 1D15	1	8	0.042	18	68	680	√	√	√
MF72 1.3D15	1.3	8	0.048	18	68	680	√	√	√
MF72 1.5D15	1.5	8	0.052	18	69	680	√	√	√
MF72 2D15	2	8	0.062	18	69	680	√	√	
MF72 2.5D15	2.5	7	0.065	18	76	680	√	√	√
MF72 3D15	3	7	0.075	18	76	680	√	√	√
MF72 3.3D15	3.3	6.5	0.085	18	76	680	√	√	
MF72 4D15	4	6	0.095	18	76	680	√	√	
MF72 5D15	5	6	0.112	20	76	680	√	√	√
MF72 6D15	6	5	0.155	20	80	470	√	√	√
MF72 7D15	7	5	0.173	20	80	470	√	√	√
MF72 8D15	8	5	0.178	20	80	470	√	√	√
MF72 10D15	10	5	0.18	20	75	470	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF72功率型NTC热敏电阻器系列

MF72 Series NTC Thermistor for Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D9~D11mm: -40~+170°C D13~D25mm: -40~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		I _{max} (A)	R _I max (Ω)	δ (mW/°C)	τ (s)	(μF)	CQC	TUV	UL/CUL
MF72 12D15	12	4	0.25	20	75	470	√	√	√
MF72 15D15	15	4	0.268	21	85	470	√	√	√
MF72 16D15	16	4	0.276	21	70	470	√	√	√
MF72 20D15	20	4	0.288	21	86	470	√	√	√
MF72 22D15	22	3.5	0.308	21	86	330	√	√	
MF72 25D15	25	3.5	0.358	21	86	330	√	√	
MF72 30D15	30	3.5	0.438	21	75	330	√	√	√
MF72 33D15	33	3.5	0.478	21	75	330	√	√	
MF72 47D15	47	3	0.68	21	86	330	√	√	√
MF72 55D15	55	3	0.72	21	86	330	√	√	
MF72 100D15	100	1.8	1.523	22	87	330	√	√	
MF72 120D15	120	1.8	1.652	22	87	330	√	√	√
MF72 0.7D20	0.7	11	0.018	24	89	1000	√	√	√
MF72 1D20	1	9	0.03	24	89	1000	√	√	
MF72 1.3D20	1.3	9	0.037	24	88	1000	√	√	√
MF72 1.5D20	1.5	9	0.038	24	88	1000	√	√	
MF72 2D20	2	9	0.042	24	88	1000	√	√	
MF72 2.5D20	2.5	8	0.052	24	88	820	√	√	
MF72 3D20	3	8	0.055	24	88	820	√	√	√
MF72 4D20	4	7	0.078	24	87	820	√	√	
MF72 5D20	5	7	0.087	24	87	820	√	√	√
MF72 6D20	6	6	0.113	25	103	680	√	√	√
MF72 7D20	7	6	0.128	25	103	680	√	√	
MF72 8D20	8	6	0.142	25	105	680	√	√	√
MF72 10D20	10	6	0.162	25	102	680	√	√	√
MF72 12D20	12	5	0.195	25	100	680	√	√	√
MF72 15D20	15	5	0.205	25	100	680	√	√	
MF72 16D20	16	5	0.212	25	100	680	√	√	√
MF72 18D20	18	4.5	0.232	25	100	680	√	√	
MF72 20D20	20	4.5	0.248	25	105	680	√	√	
MF72 22D20	22	4.5	0.268	25	105	680	√	√	
MF72 25D20	25	4	0.302	26	115	680	√	√	
MF72 30D20	30	4	0.355	26	115	680	√	√	√
MF72 47D20	47	4	0.612	25	113	680	√	√	√
MF72 120D20	120	2.5	1.628	28	120	680	√	√	√
MF72 0.7D25	0.7	12	0.014	30	120	1200	√	√	√
MF72 1D25	1	11	0.02	30	121	1200	√	√	√
MF72 1.5D25	1.5	10	0.027	30	121	1200	√	√	√
MF72 2D25	2	10	0.034	32	124	1000	√	√	
MF72 2.5D25	2.5	9	0.034	32	124	1000	√	√	√
MF72 3D25	3	9	0.044	32	124	1000	√	√	√
MF72 5D25	5	8	0.07	32	125	1000	√	√	√
MF72 7D25	7	7	0.101	33	125	820	√	√	
MF72 8D25	8	7	0.114	33	125	820	√	√	√
MF72 10D25	10	7	0.13	32	127	820	√	√	√
MF72 12D25	12	6	0.156	32	126	820	√	√	√
MF72 15D25	15	6	0.158	35	126	820	√	√	√
MF72 16D25	16	6	0.16	35	126	820	√	√	√
MF72 20D25	20	6	0.21	35	126	820	√	√	√
MF72 120D25	120	3	1.528	35	126	820	√	√	

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF73T大功率型NTC热敏电阻器系列

MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 特点 Features

- 体积小、功率大、抑制浪涌电流能力强
- 材料常数 (B值) 大, 残余电阻小, 自身功耗小
- 大电流, 长寿命, 高可靠性
- 便于线路板安装, 系列全, 应用范围宽

- Compact size, high power, and excellent surge current suppression.
- High material constant (B value), low residual resistance, and low power consumption.
- High steady-state operating current, extended operational life, and high reliability.
- Easy installation on circuit boards, full range series, and wide range of applications.

● 应用范围 Applications

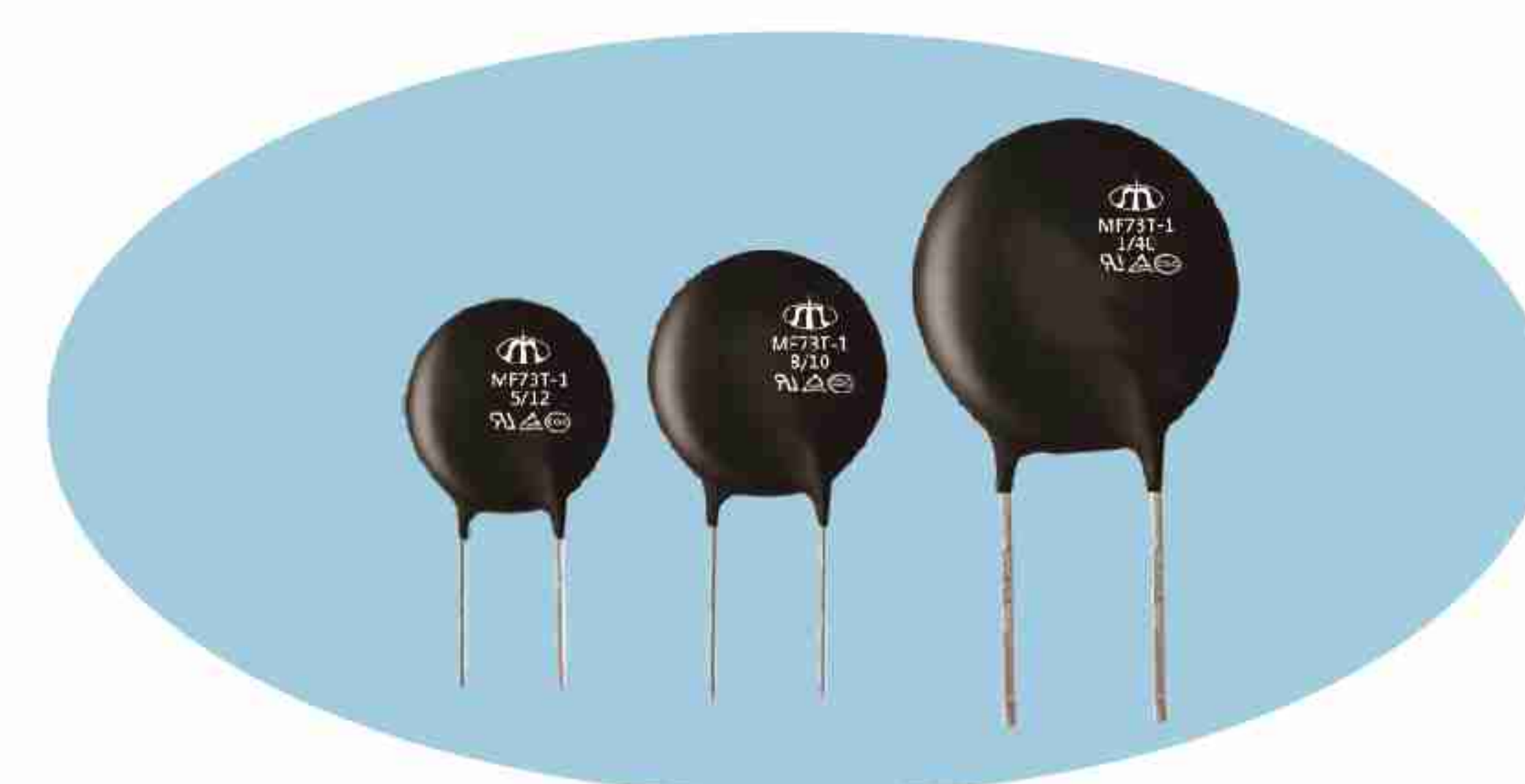
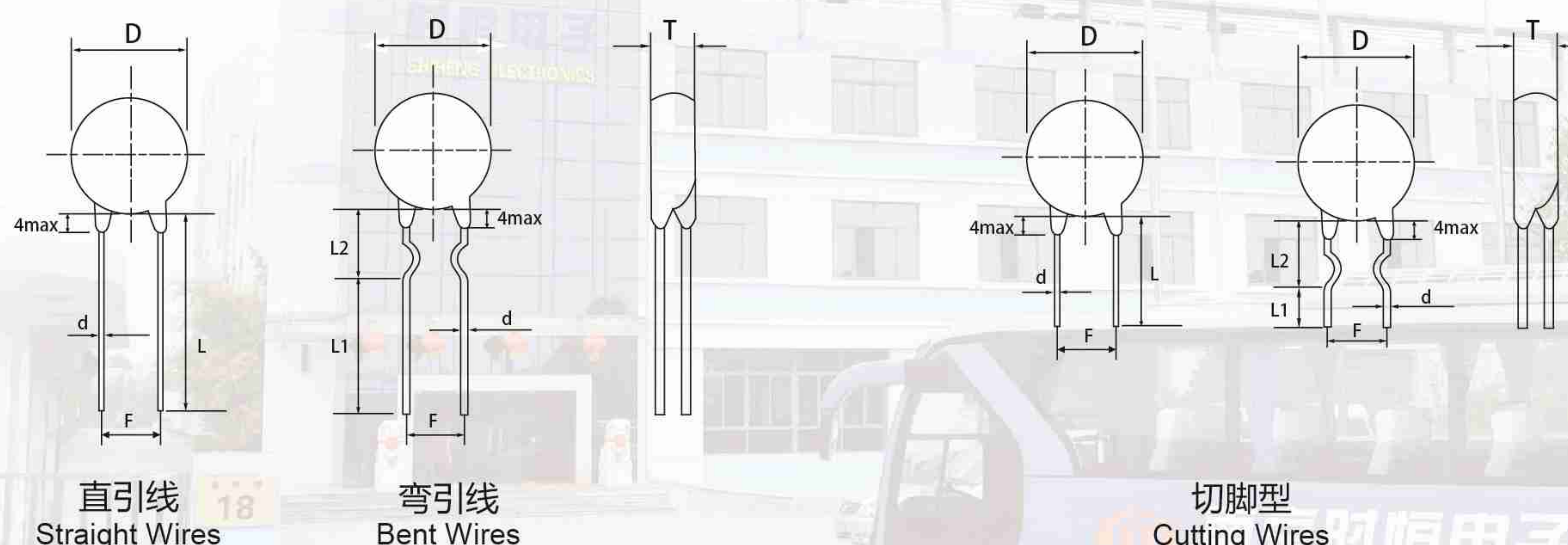
- 大功率开关电源、转换电源、UPS电源
- 大功率动力电池充电器、电动汽车充电器
- 大功率LED灯、大功率电子节能灯等照明灯具

- High-power switching power supplies, converters, UPS systems.
- High-power battery chargers and electric vehicle chargers.
- High-power LED lights, electronic energy-saving lamps, and other lighting fixtures.

● MF73T-1 产品标志说明 Marking Instruction



● MF73T-1 外形尺寸 Dimensions (mm)



江苏省高新技术产品
High-Tech Product in Jiangsu Province

● 安规认证 Certifications



UL1434 认证
UL1434 Certification
(File# E241319)



CQC 认证
CQC Certification
(File# 10001053047)

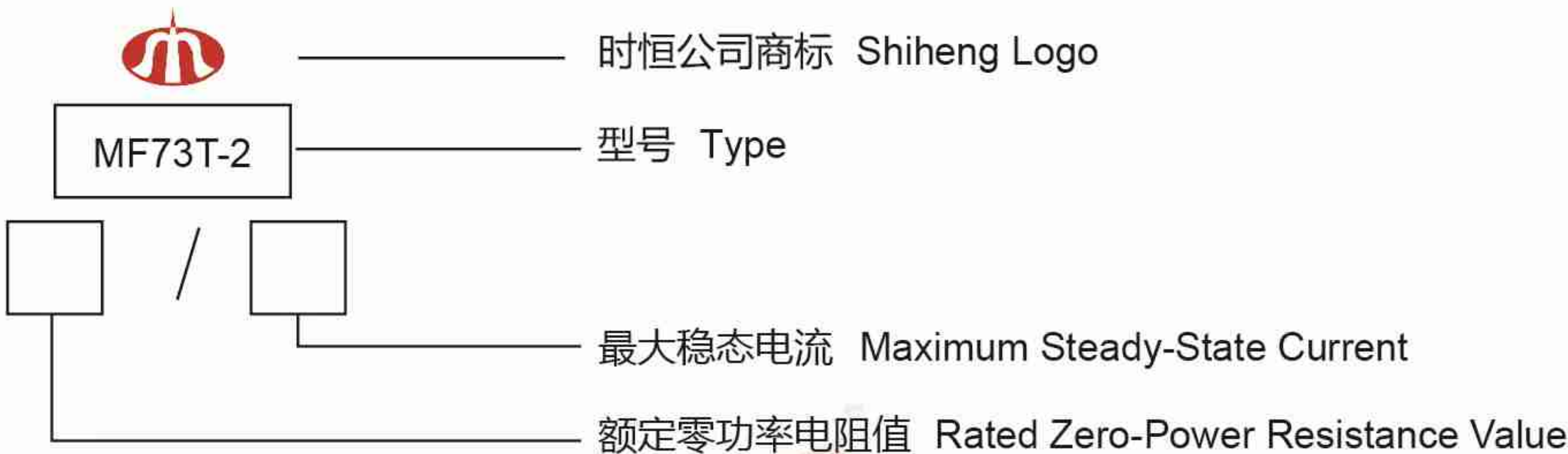


TUV 认证
TUV Certification
(File# R50245892)

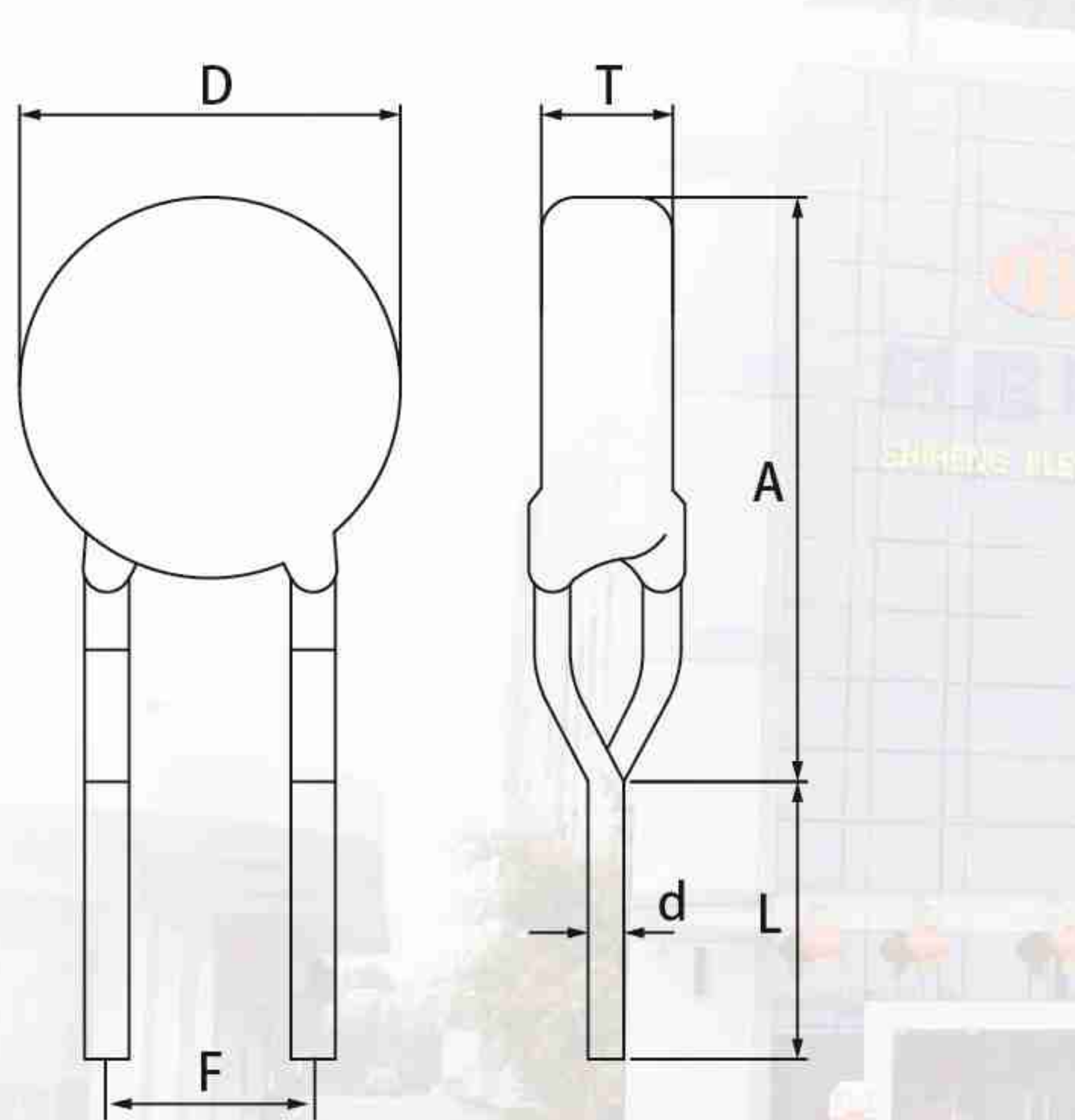
MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

尺寸 Dim. (mm) 本体直径 Body diameter (mm)	代号 Code	Dmax	d±0.05	F±0.5	Tmax	直引线 Straight Wires	弯引线 Bent Wires	
						Lmin	L1min	L2±2
Φ3		4.5	0.45	2.5	4	25	20/5	5
Φ5		6.0	0.45	2.5	5	25	20/5	5
Φ7		8.0	0.6	5	5	25	20/5	5
Φ8		10.0	0.8	7.5/5	5.5	25	20/5	5
Φ10		12.0	0.8	7.5/5	5.5	25	20/5	5
Φ13		14.0	0.8	7.5	6	25	20/5	5
Φ15		16.0	0.8	7.5	6	25	20/5	5
Φ20		21.0	1.0	10	7	25	/	/
Φ25		29.0	1.0	10	8	25	/	/
Φ30		35.0	1.6	18 ±1.5	10	25	/	/
Φ35		40.0	2.0	18 ±1.5	12	25	/	/
Φ40		45.0	2.0/2.6	18 ±1.5	12	25	/	/

MF73T-2 产品标志说明 Marking Instruction



MF73T-2 外形尺寸 Dimensions (mm)



The diagram shows the physical dimensions of the MF73T-2 thermistor. It includes a side view with dimensions D (body diameter), T (total height), A (height to the top of the leads), d (lead diameter), L (lead length), and F (lead spacing). It also includes a top view showing the circular body and the rectangular leads.

尺寸 Dim. (mm) 本体直径 Body diameter (mm)	代号 Code	Dmax	Lmin	Amax	F±1	Tmax	d±0.05
Φ20		21	20	38	10	10	1.2
Φ25		29	20	40	10	12	1.2
Φ30		35	20	55	18 ±1.5	15	1.6
Φ35		40	20	58	18 ±1.5	18	2.0
Φ40		45	20	60	18 ±1.5	18	2.0/2.6

MF73T大功率型NTC热敏电阻器系列

MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _{I_{max}} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter : Φ3mm									
MF73T-1 0.7/3	0.7	2500	3	0.123	1.5	100	√	√	
MF73T-1 1/2.5	1	2500	2.5	0.152		100	√	√	
MF73T-1 1.5/2	1.5	2500	2	0.213		100	√	√	√
MF73T-1 2/2	2	2500	2	0.321		100	√	√	
MF73T-1 2.5/2	2.5	2500	2	0.398		100	√	√	√
MF73T-1 3/1.5	3	2500	1.5	0.452		100	√	√	
MF73T-1 5/1.5	5	2500	1.5	0.493		100	√	√	√
MF73T-1 8/1	8	2600	1	1.025		100	√	√	√
MF73T-1 10/1	10	2600	1	1.223		100	√	√	√
MF73T-1 20/0.7	20	2600	0.7	3.011		100	√	√	√
MF73T-1 22/0.7	22	2600	0.7	3.321		100	√	√	
MF73T-1 25/0.7	25	2600	0.7	3.461		47	√	√	
MF73T-1 30/0.7	30	2600	0.7	3.651		47	√	√	
MF73T-1 33/0.7	33	2600	0.7	4.012		47	√	√	
MF73T-1 47/0.4	47	2600	0.4	6.589		47	√	√	
MF73T-1 50/0.4	50	2600	0.4	7.346		47	√	√	
本体直径 Body diameter : Φ5mm									
MF73T-1 1/3.5	1	2500	3.5	0.92	1.8	110	√	√	
MF73T-1 1.5/3	1.5	2500	3	0.131		110	√	√	√
MF73T-1 2.5/3	2.5	2500	3	0.172		110	√	√	√
MF73T-1 3/2.5	3	2500	2.5	0.192		110	√	√	√
MF73T-1 5/2.5	5	2500	2.5	0.261		110	√	√	√
MF73T-1 8/2	8	2600	2	0.52		110	√	√	√
MF73T-1 10/2	10	2600	2	0.542		110	√	√	√
MF73T-1 12/1.5	12	2600	1.5	0.623		110	√	√	
MF73T-1 13/1.5	13	2600	1.5	0.653		110	√	√	
MF73T-1 15/1.2	15	2600	1.2	0.753		110	√	√	
MF73T-1 16/1.2	16	2600	1.2	1.132		110	√	√	
MF73T-1 20/1	20	2600	1	1.544		110	√	√	√
MF73T-1 22/1	22	2600	1	1.604		110	√	√	
MF73T-1 30/1	30	2600	1	1.715		68	√	√	
MF73T-1 33/0.8	33	2600	0.8	1.898		68	√	√	
MF73T-1 36/0.8	36	2600	0.8	1.909		68	√	√	
MF73T-1 47/0.8	47	2800	0.8	2.102		68	√	√	√
MF73T-1 50/0.8	50	2800	0.8	2.258		68	√	√	
MF73T-1 60/0.6	60	2800	0.6	3.069		47	√	√	
MF73T-1 100/0.6	100	3000	0.6	3.958		47	√	√	
MF73T-1 120/0.5	120	3000	0.5	5.023		47	√	√	
MF73T-1 200/0.3	200	3200	0.3	1.610		47	√	√	√
本体直径 Body diameter : Φ7mm									
MF73T-1 0.7/5	0.7	2600	5	0.038	2.0	220	√	√	
MF73T-1 1/4.5	1	2600	4.5	0.048		220	√	√	√
MF73T-1 1.3/4.5	1.3	2600	4.5	0.067		220	√	√	
MF73T-1 1.5/4.5	1.5	2600	4.5	0.094		220	√	√	√
MF73T-1 2/4	2	2600	4	0.117		220	√	√	
MF73T-1 2.5/4	2.5	2600	4	0.128		220	√	√	√
MF73T-1 3/4	3	2600	4	0.131		220	√	√	√
MF73T-1 4/3	4	2600	3	0.205		220	√	√	
MF73T-1 4.7/3	4.7	2600	3	0.213		220	√	√	

注: 若非特别指出, R25的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R25 is ±20%.

MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25 ±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I _{max} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ7mm									
MF73T-1 5/3	5	2600	3	0.216	2.0	220	√	√	√
MF73T-1 6/2.5	6	2600	2.5	0.218		150	√	√	
MF73T-1 7/2.5	7	2600	2.5	0.309		150	√	√	
MF73T-1 8/2.5	8	2600	2.5	0.334		150	√	√	√
MF73T-1 10/2.5	10	2800	2.5	0.356		150	√	√	√
MF73T-1 12/2	12	2800	2	0.497		150	√	√	
MF73T-1 15/2	15	2800	2	0.510		150	√	√	
MF73T-1 16/2	16	2800	2	0.514		150	√	√	
MF73T-1 20/1.5	20	2800	1.5	0.775		150	√	√	√
MF73T-1 22/1.5	22	2800	1.5	0.784		150	√	√	
MF73T-1 30/1.5	30	2800	1.5	0.840		150	√	√	
MF73T-1 33/1	33	2800	1	1.070		150	√	√	
MF73T-1 47/1	47	2800	1	1.406		150	√	√	√
MF73T-1 50/1	50	2800	1	1.409		100	√	√	
MF73T-1 60/0.8	60	3000	0.8	2.141		100	√	√	
MF73T-1 68/0.8	68	3000	0.8	2.162		100	√	√	
MF73T-1 80/0.8	80	3000	0.8	2.191		68	√	√	
MF73T-1 82/0.8	82	3000	0.8	2.201		68	√	√	
MF73T-1 100/0.8	100	3000	0.8	2.725		68	√	√	
MF73T-1 120/0.8	120	3000	0.8	3.271		68	√	√	
MF73T-1 150/0.5	150	3200	0.5	4.982		68	√	√	
MF73T-1 200/0.5	200	3200	0.5	6.643		68	√	√	
本体直径 Body diameter: Φ8mm									
MF73T-1 0.7/7	0.7	2600	7	0.032	2.3	470	√	√	
MF73T-1 1/6	1	2600	6	0.040		470	√	√	√
MF73T-1 1.3/6	1.3	2600	6	0.056		470	√	√	
MF73T-1 1.5/6	1.5	2600	6	0.078		470	√	√	√
MF73T-1 2/5	2	2600	5	0.098		470	√	√	
MF73T-1 2.5/5	2.5	2600	5	0.107		470	√	√	√
MF73T-1 3/5	3	2600	5	0.109		470	√	√	√
MF73T-1 4/4	4	2600	4	0.171		330	√	√	
MF73T-1 5/4	5	2600	4	0.180		330	√	√	√
MF73T-1 6/4	6	2600	4	0.182		220	√	√	
MF73T-1 7/3	7	2800	3	0.258		220	√	√	
MF73T-1 8/3	8	2800	3	0.278		220	√	√	√
MF73T-1 10/3	10	2800	3	0.297		220	√	√	√
MF73T-1 12/2.5	12	2800	2.5	0.414		220	√	√	
MF73T-1 15/2.5	15	2800	2.5	0.425		220	√	√	
MF73T-1 16/2.5	16	2800	2.5	0.428		220	√	√	
MF73T-1 20/2	20	3000	2	0.646		220	√	√	√
MF73T-1 22/2	22	3000	2	0.653		220	√	√	
MF73T-1 30/2	30	3000	2	0.700		220	√	√	
MF73T-1 33/1.5	33	3000	1.5	1.139		220	√	√	
MF73T-1 47/1.5	47	3200	1.5	1.172		220	√	√	√
MF73T-1 50/1.5	50	3200	1.5	1.174		150	√	√	
MF73T-1 60/1.5	60	3200	1.5	1.784		150	√	√	
MF73T-1 68/1.2	68	3200	1.2	1.802		150	√	√	
MF73T-1 80/1.2	80	3200	1.2	1.825		150	√	√	
MF73T-1 82/1.2	82	3200	1.2	1.850		150	√	√	

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I max (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ8mm									
MF73T-1 100/1.2	100	3200	1.2	2.271	2.3	150	√	√	
MF73T-1 120/1.2	120	3200	1.2	2.007		150	√	√	
MF73T-1 200/1	200	3400	1	4.152		100	√	√	
MF73T-1 220/0.8	220	3400	0.8	4.227		100	√	√	
MF73T-1 400/0.5	400	3600	0.5	9.956		100	√	√	
本体直径 Body diameter: Φ10mm									
MF73T-1 0.7/8	0.7	2600	8	0.041	2.5	560	√	√	√
MF73T-1 1/7	1	2600	7	0.062		560	√	√	√
MF73T-1 1.3/7	1.3	2600	7	0.07		560	√	√	
MF73T-1 1.5/7	1.5	2600	7	0.072		560	√	√	√
MF73T-1 2/6	2	2600	6	0.073		560	√	√	
MF73T-1 2.5/6	2.5	2600	6	0.075		560	√	√	√
MF73T-1 3/6	3	2600	6	0.08		560	√	√	√
MF73T-1 4/5	4	2600	5	0.09		560	√	√	
MF73T-1 5/5	5	2800	5	0.1		560	√	√	√
MF73T-1 6/5	6	2800	5	0.12		470	√	√	
MF73T-1 7/4	7	2800	4	0.144		470	√	√	
MF73T-1 8/4	8	2800	4	0.155		470	√	√	√
MF73T-1 9/4	9	2800	4	0.165		470	√	√	
MF73T-1 10/4	10	2800	4	0.175		470	√	√	√
MF73T-1 12/4	12	2800	4	0.192		470	√	√	
MF73T-1 15/3	15	2800	3	0.23		330	√	√	
MF73T-1 16/3	16	2800	3	0.25		330			
MF73T-1 20/3	20	3000	3	0.27		330	√	√	√
MF73T-1 22/3	22	3000	3	0.285		330	√	√	
MF73T-1 25/2.5	25	3000	2.5	0.31		330	√	√	
MF73T-1 30/2.5	30	3000	2.5	0.352		330	√	√	
MF73T-1 33/2.5	33	3000	2.5	0.384		330	√	√	
MF73T-1 47/2	47	3200	2	0.425		330	√	√	√
MF73T-1 50/2	50	3200	2	0.45		330	√	√	
MF73T-1 60/2	60	3200	2	0.54		330	√	√	
MF73T-1 68/2	68	3200	2	0.621		330	√	√	
MF73T-1 80/2	80	3200	2	0.82		220	√	√	
MF73T-1 82/2	82	3200	2	0.83		220	√	√	
MF73T-1 120/1.5	120	3000	1.5	1.268		220	√	√	
MF73T-1 200/1.3	200	3200	1.3	2.895		220	√	√	
本体直径 Body diameter: Φ13mm									
MF73T-1 0.7/9	0.7	2600	9	0.032	3.2	680	√	√	√
MF73T-1 1/9	1	2600	9	0.032		680	√	√	√
MF73T-1 1.3/9	1.3	2600	9	0.042		680	√	√	
MF73T-1 1.5/9	1.5	2600	9	0.043		680	√	√	√
MF73T-1 2/8	2	2600	8	0.046		680	√	√	
MF73T-1 2.5/8	2.5	2600	8	0.048		680	√	√	√
MF73T-1 3/8	3	2600	8	0.052		680	√	√	√
MF73T-1 4/7	4	2800	7	0.068		560	√	√	
MF73T-1 5/7	5	2800	7	0.078		560	√	√	√
MF73T-1 6/6	6	2800	6	0.09		560	√	√	
MF73T-1 7/6	7	3000	6	0.098		560	√	√	
MF73T-1 8/6	8	3000	6	0.104		560	√	√	√

注: 若非特别指出, R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73T大功率型NTC热敏电阻器系列

MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I max (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ13mm									
MF73T-1 10/6	10	3000	6	0.126	2.3	560	√	√	√
MF73T-1 12/5	12	3200	5	0.146		560	√	√	
MF73T-1 15/4	15	3200	4	0.155		560	√	√	
MF73T-1 16/4	16	3200	4	0.158		560	√	√	
MF73T-1 20/4	20	3200	4	0.192		560	√	√	√
MF73T-1 22/4	22	3200	4	0.23		560	√	√	
MF73T-1 25/4	25	3200	4	0.245		560	√	√	
MF73T-1 30/3.5	30	3200	3.5	0.237		560	√	√	
MF73T-1 33/3.5	33	3200	3.5	0.261		560	√	√	
MF73T-1 47/3	47	3200	3	0.34		560	√	√	√
MF73T-1 60/2.5	60	3200	2.5	0.42		560	√	√	
MF73T-1 68/2.5	68	3200	2.5	0.603		560	√	√	
MF73T-1 80/2.5	80	3200	2.5	0.82		560	√	√	
MF73T-1 82/2.5	82	3200	2.5	0.828		560	√	√	
MF73T-1 120/1.8	120	3400	1.8	0.994		560	√	√	
本体直径 Body diameter: Φ15mm									
MF73T-1 0.7/11	0.7	2600	11	0.024	3.6	1000	√	√	√
MF73T-1 1/10.5	1	2600	10.5	0.03		1000	√	√	√
MF73T-1 1.3/10	1.3	2600	10	0.034		820	√	√	
MF73T-1 1.5/10	1.5	2600	10	0.036		820	√	√	√
MF73T-1 2/9.5	2	2600	9.5	0.04		820	√	√	
MF73T-1 2.5/9.5	2.5	2600	9.5	0.044		820	√	√	√
MF73T-1 3/9	3	2800	9	0.046		820	√	√	√
MF73T-1 4/8	4	3000	8	0.05		820	√	√	
MF73T-1 5/8	5	3000	8	0.058		820	√	√	√
MF73T-1 6/7	6	3000	7	0.069		680	√	√	
MF73T-1 7/7	7	3000	7	0.078		680	√	√	
MF73T-1 8/7	8	3000	7	0.084		680	√	√	√
MF73T-1 10/7	10	3200	7	0.098		680	√	√	√
MF73T-1 12/6	12	3200	6	0.116		680	√	√	
MF73T-1 15/6	15	3200	6	0.125		680	√	√	
MF73T-1 16/6	16	3200	6	0.129		680	√	√	
MF73T-1 20/6	20	3200	6	0.136		680	√	√	√
MF73T-1 22/5	20	3200	5	0.145		680	√	√	
MF73T-1 30/5	30	3200	5	0.165		680	√	√	
MF73T-1 33/5	33	3200	5	0.182		680	√	√	
MF73T-1 40/4	40	3200	4	0.201		680	√	√	
MF73T-1 47/4	47	3200	4	0.201		680	√	√	√
MF73T-1 55/4	55	3200	4	0.257		680	√	√	
MF73T-1 66/3	66	3200	3	0.365		680	√	√	
MF73T-1 68/3	68	3200	3	0.401		680	√	√	
MF73T-1 120/2.5	120	3400	2.5	0.652		680	√	√	
本体直径 Body diameter: Φ20mm									
MF73T-1 0.5/16	0.5	2600	16	0.026	5.0	1500	√	√	
MF73T-2 0.5/16	0.5	2600	16	0.026		3000	√	√	
MF73T-1 0.7/16	0.7	2600	16	0.026		1500	√	√	√
MF73T-2 0.7/16	0.7	2600	16	0.026		3000	√	√	√
MF73T-1 1/16	1	2600	16	0.027		1500	√	√	√
MF73T-2 1/16	1	2600	16	0.027		3000	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73T大功率型NTC热敏电阻器系列

MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I max (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ20mm									
MF73T-1 1.5/15	1.5	2600	15	0.03	5.0	1500	√	√	√
MF73T-2 1.5/15	1.5	2600	15	0.03		3000	√	√	√
MF73T-1 2/14	2	2600	14	0.035		1500	√	√	
MF73T-2 2/14	2	2600	14	0.035		3000	√	√	
MF73T-1 2.5/13	2.5	2800	13	0.038		1500	√	√	√
MF73T-2 2.5/13	2.5	2800	13	0.038		3000	√	√	√
MF73T-1 3/12	3	2800	12	0.04		1200	√	√	√
MF73T-2 3/12	3	2800	12	0.04		2200	√	√	√
MF73T-1 4/12	4	2800	12	0.043		1200	√	√	
MF73T-2 4/12	4	2800	12	0.043		2200	√	√	
MF73T-1 4.7/12	4.7	3000	12	0.046		1200	√	√	
MF73T-2 4.7/12	4.7	3000	12	0.046		2200	√	√	
MF73T-1 5/12	5	3000	12	0.047		1200	√	√	√
MF73T-2 5/12	5	3000	12	0.047		2200	√	√	√
MF73T-1 6/11	6	3000	11	0.052		1000	√	√	
MF73T-2 6/11	6	3000	11	0.052		1500	√	√	
MF73T-1 6.8/10	6.8	3000	10	0.055		1000	√	√	
MF73T-2 6.8/10	6.8	3000	10	0.055		1500	√	√	
MF73T-1 7/9	7	3000	9	0.056		1000	√	√	
MF73T-2 7/9	7	3000	9	0.056		1500	√	√	
MF73T-1 8/9	8	3000	9	0.058		1000	√	√	√
MF73T-2 8/9	8	3000	9	0.058		1500	√	√	√
MF73T-1 10/8	10	3000	8	0.085		1000	√	√	√
MF73T-2 10/8	10	3000	8	0.085		1500	√	√	√
MF73T-1 12/7.5	12	3200	7.5	0.098		1000	√	√	
MF73T-2 12/7.5	12	3200	7.5	0.098		1500	√	√	
MF73T-1 15/7	15	3200	7	0.112		1000	√	√	
MF73T-2 15/7	15	3200	7	0.112		1500	√	√	
MF73T-1 16/7	16	3200	7	0.122		1000	√	√	
MF73T-2 16/7	16	3200	7	0.122		1500	√	√	
MF73T-1 18/7	18	3200	7	0.123		1000	√	√	
MF73T-2 18/7	18	3200	7	0.123		1500	√	√	
MF73T-1 20/7	20	3200	7	0.132		1000	√	√	√
MF73T-2 20/7	20	3200	7	0.132		1500	√	√	√
MF73T-1 22/7	22	3200	7	0.145		1000	√	√	
MF73T-2 22/7	22	3200	7	0.145		1500	√	√	
MF73T-1 25/6	25	3200	6	0.168		1000	√	√	
MF73T-2 25/6	25	3200	6	0.168		1500	√	√	
MF73T-1 30/6	30	3200	6	0.195		1000	√	√	
MF73T-2 30/6	30	3200	6	0.195		1500	√	√	
MF73T-1 33/6	33	3200	6	0.214		1000	√	√	
MF73T-2 33/6	33	3200	6	0.214		1500	√	√	
MF73T-1 47/5	47	3200	5	0.325		1000	√	√	√
MF73T-2 47/5	47	3200	5	0.325		1500	√	√	√
MF73T-1 50/5	50	3200	5	0.345		1000	√	√	
MF73T-2 50/5	50	3200	5	0.345		1500	√	√	
MF73T-1 60/4	60	3200	4	0.525		1000	√	√	
MF73T-2 60/4	60	3200	4	0.525		1500	√	√	
MF73T-1 68/4	68	3200	4	0.628		1000	√	√	

注：若非特别指出，R25的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R25 is ±20%.

MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25 ±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I max (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ20mm									
MF73T-2 68/4	68	3200	4	0.628	5.0	1500	√	√	
MF73T-1 120/3	120	3200	3	0.658		820	√	√	
MF73T-2 120/3	120	3200	3	0.658		1000	√	√	
本体直径 Body diameter: Φ25mm									
MF73T-1 0.5/22	0.5	2600	22	0.017	7.0	2200	√	√	
MF73T-2 0.5/22	0.5	2600	22	0.017		3500	√	√	
MF73T-1 0.7/22	0.7	2600	22	0.018		2200	√	√	√
MF73T-2 0.7/22	0.7	2600	22	0.018		3500	√	√	√
MF73T-1 1/20	1	2600	20	0.021		2200	√	√	√
MF73T-2 1/20	1	2600	20	0.021		3500	√	√	√
MF73T-1 1.5/19	1.5	2600	19	0.024		2200	√	√	√
MF73T-2 1.5/19	1.5	2600	19	0.024		3500	√	√	√
MF73T-1 2/18	2	2600	18	0.026		2200	√	√	
MF73T-2 2/18	2	2600	18	0.026		3500	√	√	
MF73T-1 2.5/16	2.5	2800	16	0.029		2200	√	√	√
MF73T-2 2.5/16	2.5	2800	16	0.029		3500	√	√	√
MF73T-1 3/15.5	3	2800	15.5	0.032		1500	√	√	√
MF73T-2 3/15.5	3	2800	15.5	0.032		2800	√	√	√
MF73T-1 4/15	4	2800	15	0.039		1500	√	√	
MF73T-2 4/15	4	2800	15	0.039		2800	√	√	
MF73T-1 4.7/14	4.7	3000	14	0.044		1500	√	√	
MF73T-2 4.7/14	4.7	3000	14	0.044		2800	√	√	
MF73T-1 5/14	5	3000	14	0.047		1500	√	√	√
MF73T-2 5/14	5	3000	14	0.047		2800	√	√	√
MF73T-1 6.8/12	6.8	3000	12	0.061		1500	√	√	
MF73T-2 6.8/12	6.8	3000	12	0.061		2800	√	√	
MF73T-1 7/11	7	3000	11	0.064		1500	√	√	
MF73T-2 7/11	7	3000	11	0.064		2800	√	√	
MF73T-1 8/10	8	3200	10	0.079		1200	√	√	√
MF73T-2 8/10	8	3200	10	0.079		2200	√	√	√
MF73T-1 10/10	10	3200	10	0.084		1200	√	√	√
MF73T-2 10/10	10	3200	10	0.084		2200	√	√	√
MF73T-1 12/9	12	3200	9	0.102		1200	√	√	
MF73T-2 12/9	12	3200	9	0.102		2200	√	√	
MF73T-1 14/8	14	3200	8	0.11		1200	√	√	
MF73T-2 14/8	14	3200	8	0.11		2200	√	√	
MF73T-1 15/8	15	3200	8	0.117		1200	√	√	√
MF73T-2 15/8	15	3200	8	0.117		2200	√	√	√
MF73T-1 18/8	18	3200	8	0.125		1200	√	√	
MF73T-2 18/8	18	3200	8	0.125		2200	√	√	
MF73T-1 20/8	20	3200	8	0.132		1200	√	√	√
MF73T-2 20/8	20	3200	8	0.132		2200	√	√	√
MF73T-1 22/8	22	3200	8	0.142		1200	√	√	
MF73T-2 22/8	22	3200	8	0.142		2200	√	√	
MF73T-1 25/7	25	3200	7	0.17		1200	√	√	
MF73T-2 25/7	25	3200	7	0.17		2200	√	√	
MF73T-1 30/7	30	3200	7	0.211		1200	√	√	
MF73T-2 30/7	30	3200	7	0.211		2200	√	√	
MF73T-1 33/7	33	3200	7	0.232		1200	√	√	
MF73T-2 33/7	33	3200	7	0.232		2200	√	√	

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 主要技术参数 Main Technical Specifications
工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _{I_{max}} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ30mm									
MF73T-1 0.2/32	0.2	2600	32	0.006	8.0	3000	√	√	
MF73T-2 0.2/32	0.2	2600	32	0.006		5200	√	√	
MF73T-1 0.3/32	0.3	2600	32	0.009		3000	√	√	
MF73T-2 0.3/32	0.3	2600	32	0.009		5200	√	√	
MF73T-1 0.5/30	0.5	2600	30	0.013		3000	√	√	√
MF73T-2 0.5/30	0.5	2600	30	0.013		5200	√	√	√
MF73T-1 0.7/30	0.7	2600	30	0.014		3000	√	√	√
MF73T-2 0.7/30	0.7	2600	30	0.014		5200	√	√	√
MF73T-1 1/30	1	2600	30	0.014		3000	√	√	√
MF73T-2 1/30	1	2600	30	0.014		5200	√	√	√
MF73T-1 1.5/25	1.5	2600	25	0.016		3000	√	√	√
MF73T-2 1.5/25	1.5	2600	25	0.016		5200	√	√	√
MF73T-1 2/23	2	2600	23	0.019		3000	√	√	
MF73T-2 2/23	2	2600	23	0.019		5200	√	√	
MF73T-1 2.5/20	2.5	2800	20	0.023		3000	√	√	√
MF73T-2 2.5/20	2.5	2800	20	0.023		5200	√	√	√
MF73T-1 3/19.5	3	2800	19.5	0.026		2200	√	√	√
MF73T-2 3/19.5	3	2800	19.5	0.026		5200	√	√	√
MF73T-1 4/19	4	2800	19	0.031		2200	√	√	
MF73T-2 4/19	4	2800	19	0.031		5200	√	√	
MF73T-1 4.7/18	4.7	3000	18	0.035		2200	√	√	
MF73T-2 4.7/18	4.7	3000	18	0.035		5200	√	√	
MF73T-1 5/17	5	3000	17	0.037		2200	√	√	√
MF73T-2 5/17	5	3000	17	0.037		5200	√	√	√
MF73T-1 6/17	6	3000	17	0.042		1500	√	√	
MF73T-2 6/17	6	3000	17	0.042		4700	√	√	
MF73T-1 6.8/16	6.8	3000	16	0.043		1500	√	√	
MF73T-2 6.8/16	6.8	3000	16	0.043		4700	√	√	
MF73T-1 7/15	7	3000	15	0.044		1500	√	√	
MF73T-2 7/15	7	3000	15	0.044		4700	√	√	
MF73T-1 8/14	8	3200	14	0.049		1500	√	√	√
MF73T-2 8/14	8	3200	14	0.049		4700	√	√	√
MF73T-1 10/13	10	3200	13	0.056	1500	√	√	√	
MF73T-2 10/13	10	3200	13	0.056	4700	√	√	√	
MF73T-1 12/12	12	3200	12	0.067	1500	√	√		
MF73T-2 12/12	12	3200	12	0.067	4700	√	√		
MF73T-1 15/11	15	3200	11	0.078	1500	√	√	√	
MF73T-2 15/11	15	3200	11	0.078	4700	√	√	√	
MF73T-1 18/10	18	3200	10	0.092	1500	√	√		
MF73T-2 18/10	18	3200	10	0.092	4700	√	√		
MF73T-1 20/9	20	3200	9	0.113	1500	√	√	√	
MF73T-2 20/9	20	3200	9	0.113	4700	√	√	√	
本体直径 Body diameter: Φ35mm									
MF73T-1 0.2/35	0.2	2600	35	0.005	9.0	3300	√	√	√
MF73T-2 0.2/35	0.2	2600	35	0.005		6800	√	√	√
MF73T-1 0.3/35	0.3	2600	35	0.008		3300	√	√	
MF73T-2 0.3/35	0.3	2600	35	0.008		6800	√	√	
MF73T-1 0.5/32	0.5	2600	32	0.01		3300	√	√	√
MF73T-2 0.5/32	0.5	2600	32	0.01		6800	√	√	√
MF73T-1 0.7/32	0.7	2600	32	0.01		3300	√	√	√
MF73T-2 0.7/32	0.7	2600	32	0.01		6800	√	√	√

注：若非特别指出，R25的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R25 is ±20%.

MF73T大功率型NTC热敏电阻器系列
MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150°C D8~D10mm: -40~+170°C D13~D40mm: -40~+200°C

型号 Part No.	R25 ±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I _{max} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ35mm									
MF73T-1 1/32	1	2600	32	0.011	9.0	3300	√	√	√
MF73T-2 1/32	1	2600	32	0.011		6800	√	√	√
MF73T-1 1.5/28	1.5	2600	28	0.013		3300	√	√	√
MF73T-2 1.5/28	1.5	2600	28	0.013		6800	√	√	√
MF73T-1 2/25	2	2600	25	0.017		3300	√	√	
MF73T-2 2/25	2	2600	25	0.017		6800	√	√	
MF73T-1 2.5/23	2.5	2800	23	0.02		3300	√	√	√
MF73T-2 2.5/23	2.5	2800	23	0.02		6800	√	√	√
MF73T-1 3/22	3	2800	22	0.023		3000	√	√	√
MF73T-2 3/22	3	2800	22	0.023		6800	√	√	√
MF73T-1 4/21	4	2800	21	0.026		3000	√	√	
MF73T-2 4/21	4	2800	21	0.026		6800	√	√	
MF73T-1 4.7/20	4.7	3000	20	0.029		3000	√	√	
MF73T-2 4.7/20	4.7	3000	20	0.029		6800	√	√	
MF73T-1 5/19	5	3000	19	0.03		3000	√	√	√
MF73T-2 5/19	5	3000	19	0.03		6800	√	√	√
MF73T-1 6.8/18	6.8	3000	18	0.035		2200	√	√	
MF73T-2 6.8/18	6.8	3000	18	0.035		5200	√	√	
MF73T-1 7/17	7	3000	17	0.037		2200	√	√	
MF73T-2 7/17	7	3000	17	0.037		5200	√	√	
MF73T-1 8/16	8	3200	16	0.041		2200	√	√	√
MF73T-2 8/16	8	3200	16	0.041		5200	√	√	√
MF73T-1 10/15	10	3200	15	0.045		2200	√	√	√
MF73T-2 10/15	10	3200	15	0.045		5200	√	√	√
MF73T-1 12/14	12	3200	14	0.051		2200	√	√	
MF73T-2 12/14	12	3200	14	0.051		5200	√	√	
MF73T-1 15/13	15	3200	13	0.06		2200	√	√	
MF73T-2 15/13	15	3200	13	0.06		5200	√	√	
MF73T-1 18/11	18	3200	11	0.072		2200	√	√	
MF73T-2 18/11	18	3200	11	0.072		5200	√	√	
MF73T-1 20/10	20	3200	10	0.089		2200	√	√	√
MF73T-2 20/10	20	3200	10	0.089		5200	√	√	√
本体直径 Body diameter: Φ40mm									
MF73T-1 0.2/40	0.2	2600	40	0.005	12.0	4700	√	√	√
MF73T-2 0.2/40	0.2	2600	40	0.005		16000	√	√	√
MF73T-1 0.5/40	0.5	2600	40	0.008		4700	√	√	√
MF73T-2 0.5/40	0.5	2600	40	0.008		16000	√	√	√
MF73T-1 1/40	1	2600	40	0.01		4700	√	√	√
MF73T-2 1/40	1	2600	40	0.01		14000	√	√	√
MF73T-1 1.5/36	1.5	2600	36	0.012		4700	√	√	√
MF73T-2 1.5/36	1.5	2600	36	0.012		14000	√	√	√
MF73T-1 2/32	2	2600	32	0.014		4700	√	√	
MF73T-2 2/32	2	2600	32	0.014		14000	√	√	
MF73T-1 2.5/30	2.5	2800	30	0.018		4700	√	√	√
MF73T-2 2.5/30	2.5	2800	30	0.018		14000	√	√	√
MF73T-1 3/28	3	2800	28	0.02		3300	√	√	√
MF73T-2 3/28	3	2800	28	0.02		14000	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73T大功率型NTC热敏电阻器系列

MF73T Series NTC Thermistor for High-Power Inrush Current Limiting

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): D3~D7mm: -40~+150℃ D8~D10mm: -40~+170℃ D13~D40mm: -40~+200℃

型号 Part No.	R25 ±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _I _{max} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter: Φ40mm									
MF73T-1 4/27	4	2800	27	0.022	12.0	3300	√	√	
MF73T-2 4/27	4	2800	27	0.022		14000	√	√	
MF73T-1 4.7/26	4.7	3000	26	0.023		3300	√	√	
MF73T-2 4.7/26	4.7	3000	26	0.023		11000	√	√	
MF73T-1 5/25	5	3000	25	0.028		3300	√	√	√
MF73T-2 5/25	5	3000	25	0.028		11000	√	√	√
MF73T-1 6.8/23	6.8	3000	23	0.030		3000	√	√	
MF73T-2 6.8/23	6.8	3000	23	0.030		11000	√	√	
MF73T-1 8/20	8	3200	20	0.034		3000	√	√	√
MF73T-2 8/20	8	3200	20	0.034		11000	√	√	√
MF73T-1 10/19	10	3200	19	0.038		3000	√	√	√
MF73T-2 10/19	10	3200	19	0.038		9000	√	√	√
MF73T-1 12/18	12	3200	18	0.040		3000	√	√	
MF73T-2 12/18	12	3200	18	0.040		9000	√	√	
MF73T-1 15/16	15	3200	16	0.050		3000	√	√	√
MF73T-2 15/16	15	3200	16	0.050		9000	√	√	√
MF73T-1 18/14	18	3200	14	0.062		3000	√	√	
MF73T-2 18/14	18	3200	14	0.062		9000	√	√	
MF73T-1 20/13	20	3200	13	0.075		3000	√	√	√
MF73T-2 20/13	20	3200	13	0.075		9000	√	√	√

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.



负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF73超大功率型NTC热敏电阻器系列

MF73 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

● 特点 Features

- ◎ 结构可靠、便于安装
- ◎ 抑制浪涌电流能力强、吸收能量大
- ◎ 工作的稳态电流大
- ◎ 寿命长、可靠性高

- ◎ Reliable structure and easy to install.

- ◎ Strong surge current suppression and high energy absorption.

- ◎ High steady-state operating current.

- ◎ Extended operational life and high reliability.

● 应用范围 Applications

- ◎ 各种大功率开关电源、UPS电源、转换电源
- ◎ 电动汽车充电器、充电桩
- ◎ 电机驱动装置、大功率伺服电机驱动器、逻辑控制器
- ◎ 大功率等离子体焊接机、切割机、大功率照明灯具
- ◎ 核磁共振设备、大功率专业音频功放机、大功率环形变压器、大容量功率逆变器的太阳能电池板阵列
- ◎ 高压电源驱动的工业机器人、低压智能电柜

- ◎ Various high-power switching power supplies, UPS systems, converters.

- ◎ Electric vehicle chargers and charging stations.

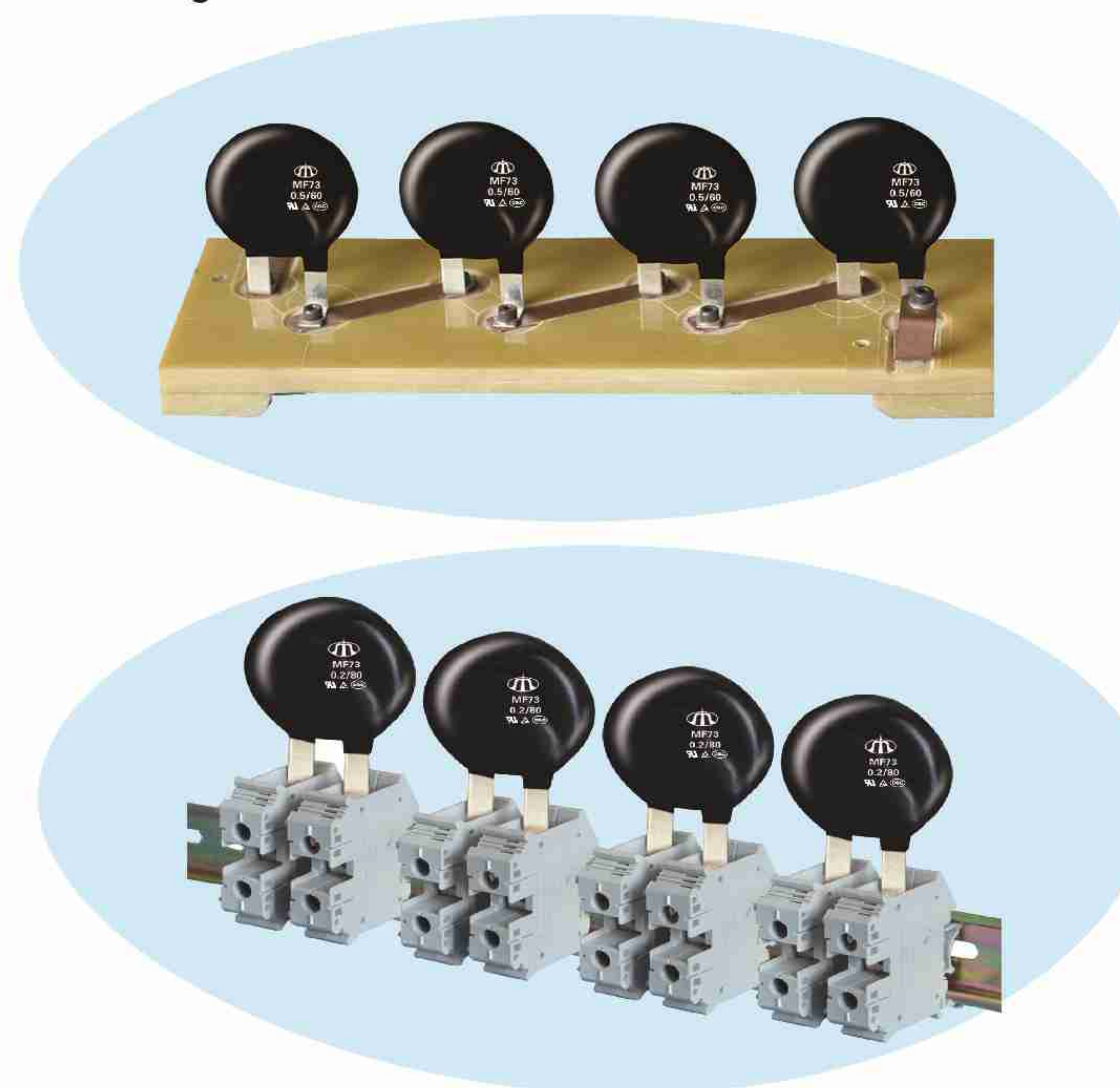
- ◎ Motor drive units, high-power servo motor drivers, logic controllers.

- ◎ High-power plasma welders, cutters, high-power lighting fixtures.

- ◎ Magnetic Resonance Imaging (MRI) systems, high-power professional audio amplifiers, high-power toroidal transformers, and large-capacity power inverters for solar panel arrays.

- ◎ Industrial robots driven by high-voltage power sources, low-voltage smart switchboards.

● MF73产品标志说明 Marking Instruction



● 安规认证 Certifications



UL1434 认证
UL1434 Certification
(File# E241319)



CQC认证
CQC Certification
(File# CQC22001370459)



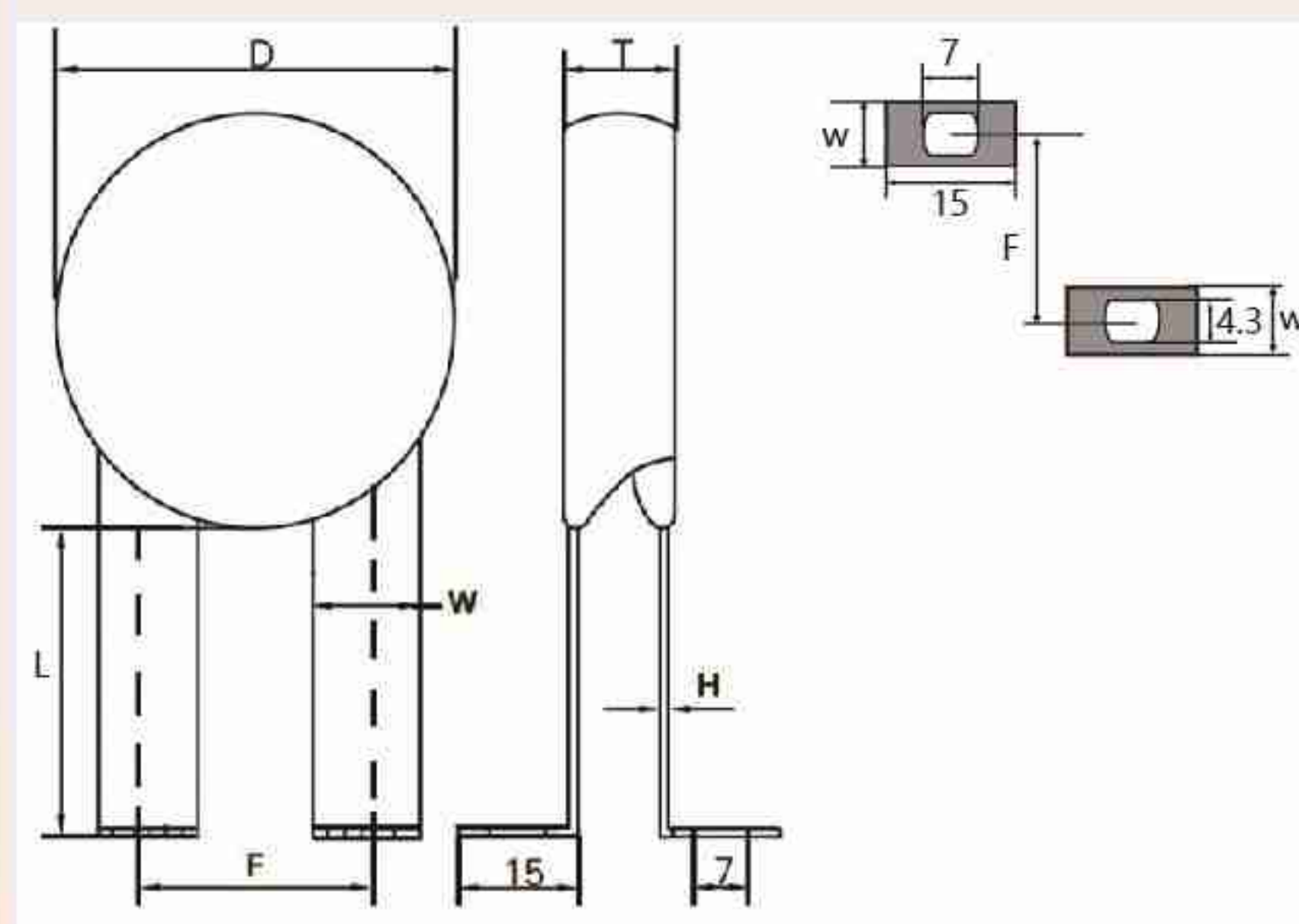
TUV认证
TUV Certification
(File# R50245892)

MF73 超大功率型NTC热敏电阻器系列

MF73 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

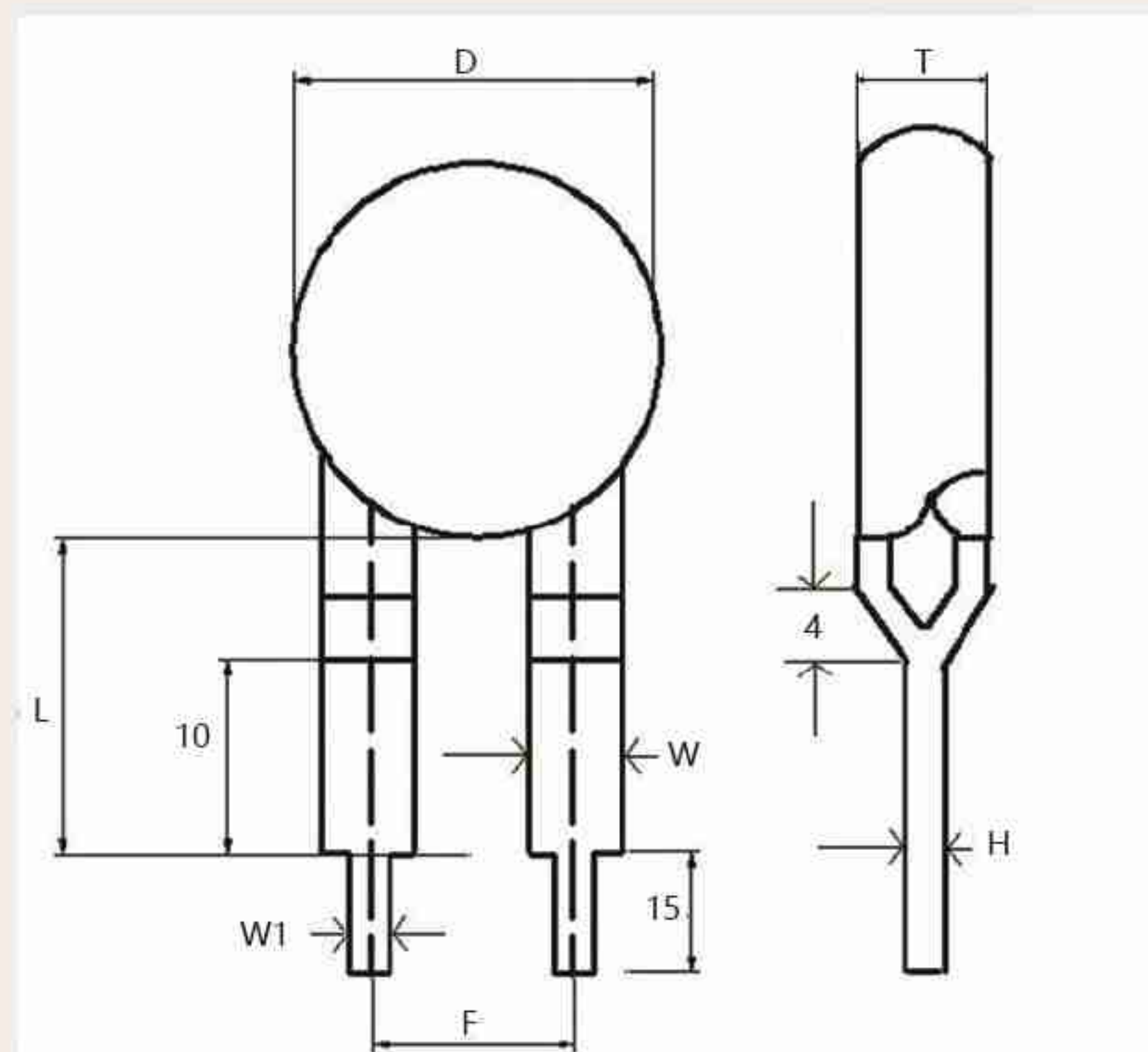
● 外形尺寸 Dimensions (mm)

弯线/Curved



尺寸 Dim. (mm)	代号 Code	Dmax	L±2	W±0.2	F±1.5	Tmax	H±0.1
本体直径 Body diameter (mm)							
Φ40		45	20	8	22.5	18	1.0
Φ45		50	20	8	22.5	18	1.0
Φ50		55	20	8	22.5	18	1.0

直线/Straight



尺寸 Dim. (mm)	代号 Code	Dmax	L±2	W±0.2	F±1.5	Tmax	H±0.1
本体直径 Body diameter (mm)							
Φ40		45	30	10	22.5	18	1.0
Φ45		50	30	10	22.5	18	1.0
Φ50		55	30	10	22.5	18	1.0

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): -40~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	B _{25/50} ±10% (K)	25°C时最大稳态电流 Max. Steady-state Current at 25°C I _{max} (A)	最大电流时近似电阻值 Approx. Resistance at Max. Current R _{I_{max}} (Ω)	25°C时最大额定功耗 Max. Power Rating at 25°C P _{max} (W)	最大冲击电容量 Max. Capacitance at 240 VAC (μF)	产品认证 Product Certification		
							CQC	TUV	UL/CUL
本体直径 Body diameter: Φ40mm									
MF73 0.2/50	0.2	2600	50	0.005	25.0	16000	√	√	
MF73 0.5/40	0.5	2600	40	0.008		16000	√	√	
MF73 1/40	1	2600	40	0.01		14000	√	√	
MF73 1.5/36	1.5	2600	36	0.012		14000	√	√	
MF73 2/32	2	2600	32	0.014		14000	√	√	
MF73 2.5/30	2.5	2800	30	0.018		14000	√	√	
MF73 3/28	3	2800	28	0.02		14000	√	√	
MF73 4/27	4	2800	27	0.022		14000	√	√	
MF73 4.7/26	4.7	3000	26	0.023		11000	√	√	
MF73 5/25	5	3000	25	0.028		11000	√	√	
MF73 6.8/23	6.8	3000	23	0.03		11000	√	√	
MF73 8/20	8	3200	20	0.034		11000	√	√	
MF73 10/19	10	3200	19	0.038		9000	√	√	
MF73 12/18	12	3200	18	0.04		9000	√	√	
MF73 15/16	15	3200	16	0.05		9000	√	√	
MF73 18/14	18	3200	14	0.062		9000	√	√	
MF73 20/13	20	3200	13	0.075		9000	√	√	

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

MF73超大功率型NTC热敏电阻器系列

MF73 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

- 主要技术参数 Main Technical Specifications
- 工作温度 Operating Temperature (°C): -40~+200°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25℃时最大稳态电流 Max. Steady-state Current at 25℃	最大电流时近似电阻值 Approx. Resistance at Max. Current	25℃时最大额定功耗 Max. Power Rating at 25℃	最大冲击电容量 Max. Capacitance at 240 VAC	产品认证 Product Certification		
		(K)	I _{max} (A)	R _{I_{max}} (Ω)	P _{max} (W)	(μF)	CQC	TUV	UL/CUL
本体直径 Body diameter：Φ45mm									
MF73 0.2/65	0.2	2600	65	0.004	30	18000	√	√	
MF73 0.5/50	0.5	2600	50	0.007		18000	√	√	
MF73 1/48	1	2600	48	0.009		16000	√	√	
MF73 1.5/45	1.5	2600	45	0.011		16000	√	√	
MF73 2/40	2	2600	40	0.012		16000	√	√	
MF73 2.5/37	2.5	2800	37	0.015		16000	√	√	
MF73 3/35	3	2800	35	0.018		16000	√	√	
MF73 4/34	4	2800	34	0.02		13000	√	√	
MF73 4.7/32	4.7	3000	32	0.022		13000	√	√	
MF73 5/30	5	3000	30	0.025		13000	√	√	
MF73 6.8/28	6.8	3000	28	0.028		13000	√	√	
MF73 8/26	8	3200	26	0.03		13000	√	√	
MF73 10/24	10	3200	24	0.032		10000	√	√	
MF73 12/22	12	3200	22	0.034		10000	√	√	
MF73 15/20	15	3200	20	0.042		10000	√	√	
MF73 18/18	18	3200	18	0.061		10000	√	√	
MF73 20/16	20	3200	16	0.07		10000	√	√	
本体直径 Body diameter：Φ50mm									
MF73 0.2/80	0.2	2600	80	0.003	36	20000	√	√	√
MF73 0.5/60	0.5	2600	60	0.006		20000	√	√	√
MF73 1/56	1	2600	56	0.008		18000	√	√	√
MF73 1.5/50	1.5	2600	50	0.01		18000	√	√	√
MF73 2/45	2	2600	45	0.011		18000	√	√	
MF73 2.5/42	2.5	2800	42	0.012		18000	√	√	√
MF73 3/40	3	2800	40	0.015		18000	√	√	√
MF73 4/38	4	2800	38	0.018		18000	√	√	
MF73 4.7/36	4.7	3000	36	0.021		15000	√	√	
MF73 5/35	5	3000	35	0.022		15000	√	√	√
MF73 6.8/32	6.8	3000	32	0.025		15000	√	√	
MF73 8/29	8	3200	29	0.028		15000	√	√	
MF73 10/27	10	3200	27	0.03		12000	√	√	√
MF73 12/25	12	3200	25	0.033		12000	√	√	
MF73 15/23	15	3200	23	0.04		12000	√	√	
MF73 18/20	18	3200	20	0.055		12000	√	√	
MF73 20/18	20	3200	18	0.065		12000	√	√	
MF73 25/15	25	3200	15	0.085		12000	√	√	

注：若非特别指出，R25的允许偏差为±20%

Note: Unless otherwise specified, the allowable tolerance for R25 is ±20%.

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF74超大功率型NTC热敏电阻器系列

MF74 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

● 特点 Features

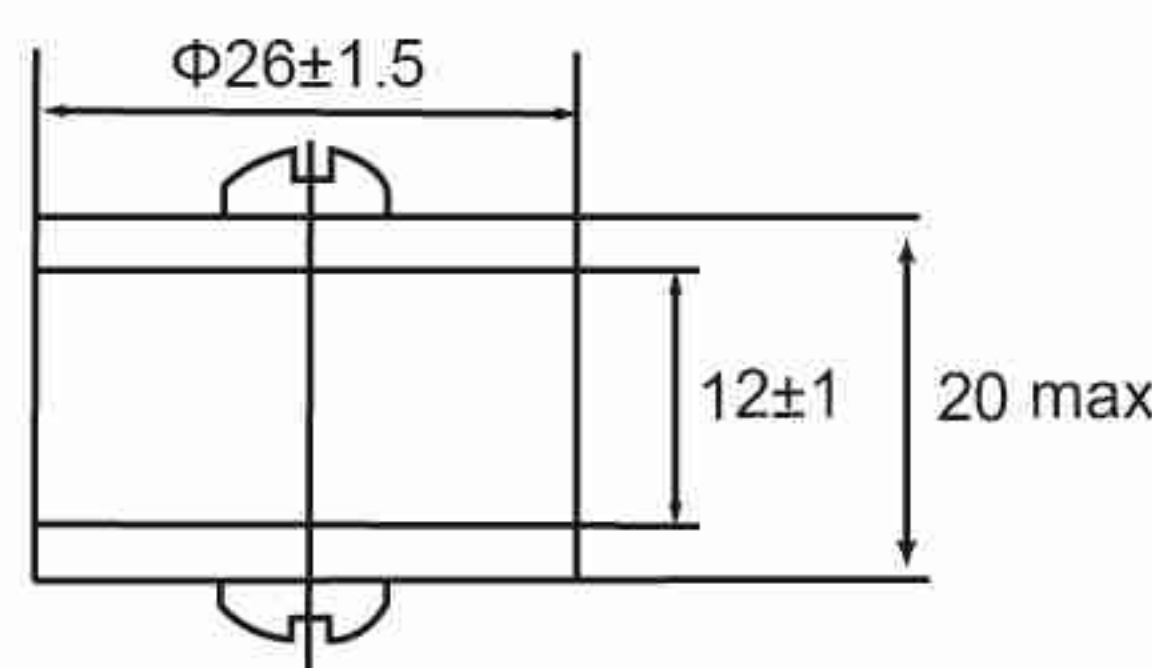
- 结构可靠、便于安装
- 抑制浪涌电流能力强
- 工作的稳态电流大
- 较大稳态电流下能持续工作

- Reliable structure and easy installation.
- Strong surge current suppression.
- High steady-state operating current.
- Sustained performance under high steady-state currents.

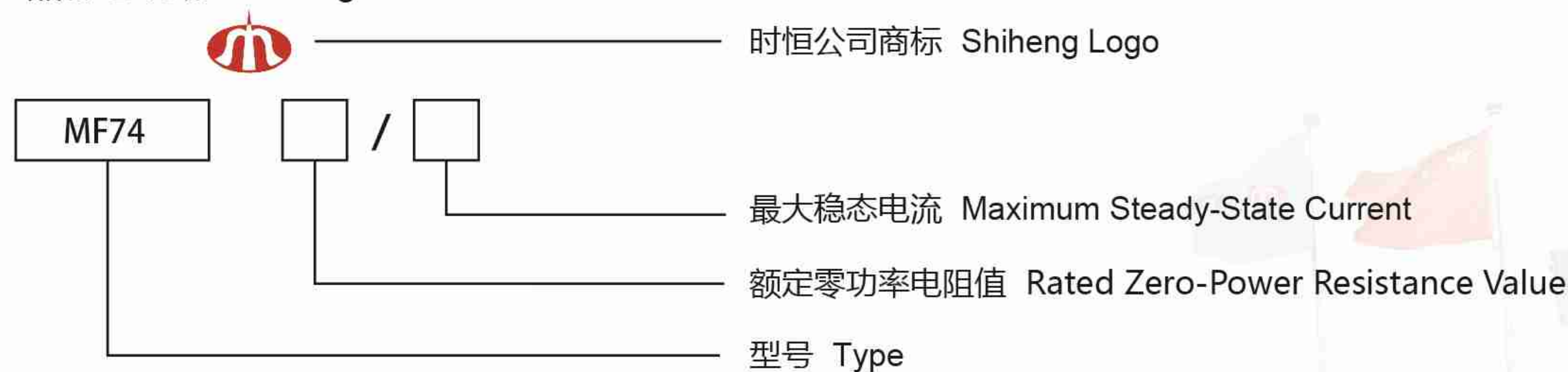
● 应用范围 Applications

- 转换电源, 开关电源, UPS电源
- 各类大功率照明灯具
- 电加热器
- Power converters, switching power supplies, and UPS systems.
- Various high-power lighting fixtures.
- Electric heaters.

● 外形尺寸 Dimensions (mm)



● 产品标志说明 Marking Instruction



● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): -55~+200°C

型号 Part No.	R ₂₅ ±20% (Ω)	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时 近似电阻值 Approx. Resistance at Max. Current	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	最大冲击电容量 Max. Capacitance at 240 VAC
		I _{max} (A)	R _{imax} (Ω)	δ (mW/°C)	τ (s)	(μF)
MF74 0.5/40	0.5	40	0.00875	118	340	3000
MF74 0.7/36	0.7	36	0.01100	118	340	3000
MF74 1/32	1	32	0.01370	118	340	3000
MF74 1.5/27	1.5	27	0.02060	118	340	3000
MF74 2/25	2	25	0.02400	120	340	3000
MF74 2.5/25	2.5	25	0.02520	120	350	3000
MF74 3/23	3	23	0.02930	123	350	2200
MF74 4/21	4	21	0.03400	123	350	2200
MF74 5/21	5	21	0.03640	123	350	2200
MF74 6/18	6	18	0.04940	123	360	1500
MF74 8/18	8	18	0.05250	123	360	1500
MF74 10/18	10	18	0.05550	125	345	1500
MF74 12/15	12	15	0.06220	125	345	1500
MF74 16/15	16	15	0.06880	125	345	1500
MF74 20/15	20	15	0.07450	125	345	1500
MF74 25/15	25	15	0.08570	125	345	1500
MF74 30/12	30	12	0.11700	125	350	1500



专利号: ZL03277490.7
Patent No.: ZL03277490.7

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF75超大功率型NTC热敏电阻器系列

MF75 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

● 应用范围 Applications

- ◎ 核磁共振设备、大功率专业音频功放机、大功率环形变压器
- ◎ 大容量功率逆变器的太阳能电池板阵列
- ◎ 高压电源驱动的工业机器人
- ◎ MRI systems, professional audio amplifiers, and high-power toroidal transformers.
- ◎ Large-capacity power inverters for solar panel arrays.
- ◎ Industrial robots driven by high-voltage power supplies.

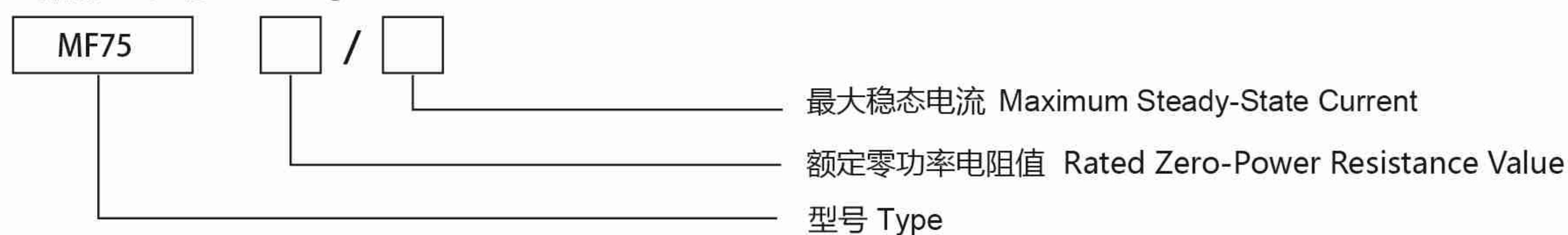
● 特点

- ◎ 无封装料覆盖芯片
- ◎ 高散热性独家专利结构
- ◎ 抑制浪涌电流能力强
- ◎ 可在稳态大电流下持续工作
- ◎ 工作温度范围宽，可在较高的温度下正常工作

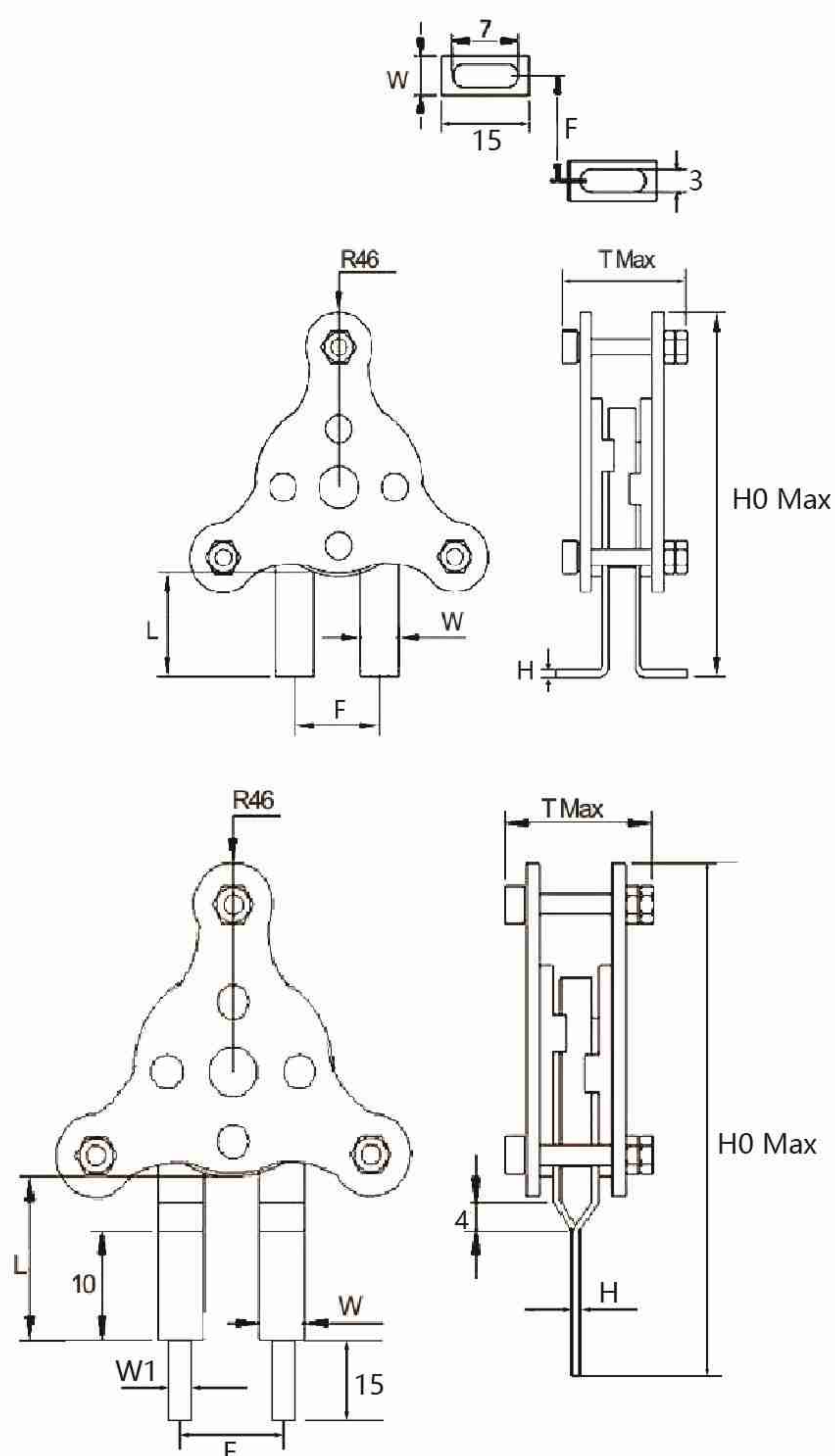
● Features

- ◎ Unencapsulated disk.
- ◎ High thermal conductivity with exclusive patented structure.
- ◎ Strong surge current suppression capability.
- ◎ Sustained operation under high steady-state currents.
- ◎ Wide operating temperature range, suitable for high-temperature environments.

● 产品标志说明 Marking Instruction



● 外形尺寸 Dimensions (mm)



尺寸 Dim. (mm)	代号 Code	H0 max	L±2	W±0.2	F±1.5	Tmax	H±0.1
本体直径 Body diameter (mm)							
Φ40		110	40	12	30	46	1.2
Φ45		110	40	12	30	46	1.2
Φ50		110	40	12	30	46	1.2

尺寸 Dim. (mm)	代号 Code	H0 max	L±2	W±0.2	W1±0.2	F±1.5	Tmax	H±0.1
本体直径 Body diameter (mm)								
Φ40		110	40	12	8	30	46	1.2
Φ45		110	40	12	8	30	46	1.2
Φ50		110	40	12	8	30	46	1.2



专利号: ZL201620516869.6
Patent No.: ZL201620516869.6

MF75 超大功率型NTC热敏电阻器系列

MF75 Series NTC Thermistor for Ultra High-Power Inrush Current Limiting

主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): -55~+250°C

型号 Part No.	R25±20% (Ω)	B25/50 ±10%	25°C时最大稳态电流 Max. Steady-state Current at 25°C	最大电流时近似电阻值 Approx. Resistance at Max. Current	25°C时最大额定功耗 Max. Power Rating at 25°C	最大冲击电容量 Max. Capacitance at 240 VAC
		(K)	I _{max} (A)	R _{imax} (Ω)	P _{max} (W)	(μF)
本体直径 Body diameter: Φ40mm						
MF75 0.2/55	0.2	2600	55	0.007	30	8000
MF75 0.5/50	0.5	2600	50	0.008		6800
MF75 1/45	1	2600	45	0.010		6800
MF75 1.5/40	1.5	2600	40	0.012		6800
MF75 2/35	2	2600	35	0.014		6800
MF75 2.5/33	2.5	2800	33	0.018		6800
MF75 3/32	3	2800	32	0.020		6800
MF75 4/30	4	2800	30	0.022		4700
MF75 4.7/28	4.7	3000	28	0.023		4700
MF75 5/27	5	3000	27	0.028		4700
MF75 6.8/25	6.8	3000	25	0.030		4700
MF75 8/22	8	3200	22	0.034		3300
MF75 10/21	10	3200	21	0.038		3300
MF75 12/20	12	3200	20	0.040		3300
MF75 15/18	15	3200	18	0.050		3300
MF75 18/16	18	3200	16	0.062		3300
MF75 20/15	20	3200	15	0.075	3300	
本体直径 Body diameter: Φ45mm						
MF75 0.2/70	0.2	2600	70	0.006	42	11500
MF75 0.5/55	0.5	2600	55	0.007		8000
MF75 1/52	1	2600	52	0.009		8000
MF75 1.5/50	1.5	2600	50	0.011		8000
MF75 2/45	2	2600	45	0.012		8000
MF75 2.5/40	2.5	2800	40	0.015		8000
MF75 3/38	3	2800	38	0.018		8000
MF75 4/36	4	2800	36	0.020		6800
MF75 4.7/35	4.7	3000	35	0.022		6800
MF75 5/35	5	3000	35	0.025		6800
MF75 6.8/32	6.8	3000	32	0.028		6800
MF75 8/30	8	3200	30	0.030		4700
MF75 10/28	10	3200	28	0.032		4700
MF75 12/25	12	3200	25	0.034		4700
MF75 15/23	15	3200	23	0.042		4700
MF75 18/20	18	3200	20	0.061		4700
MF75 20/18	20	3200	18	0.070	4700	
本体直径 Body diameter: Φ50mm						
MF75 0.2/90	0.2	2600	90	0.004	55	15000
MF75 0.5/65	0.5	2600	65	0.006		11500
MF75 1/60	1	2600	60	0.008		11500
MF75 1.5/55	1.5	2600	55	0.010		11500
MF75 2/50	2	2600	50	0.011		11500
MF75 2.5/46	2.5	2800	46	0.012		11500
MF75 3/44	3	2800	44	0.015		11500
MF75 4/42	4	2800	42	0.018		8000
MF75 4.7/40	4.7	3000	40	0.021		9000
MF75 5/40	5	3000	40	0.022		8000
MF75 6.8/35	6.8	3000	35	0.025		8000
MF75 8/32	8	3200	32	0.028		6800
MF75 10/30	10	3200	30	0.030		6800
MF75 12/28	12	3200	28	0.033		6800
MF75 15/25	15	3200	25	0.040		6800
MF75 18/22	18	3200	22	0.055		6800
MF75 20/20	20	3200	20	0.065	6800	

注：若非特别指出，R₂₅的允许偏差为±20%
Note: Unless otherwise specified, the allowable tolerance for R₂₅ is ±20%.

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF11补偿型NTC热敏电阻器系列

MF11 Series MF11 Series Compensation-Type NTC Thermistor

● 应用范围

用于一般精度的温度测量和在计量设备、电子电路中的温度补偿

● Applications

Used for general-purpose temperature measurement and temperature compensation in measuring devices and electronic circuits.

● 特点

- ◎ 体积小, 自动化生产, 一致性、互换性好
- ◎ 作为补偿元件可工作在较大电流、较大电压的应用场景
- ◎ 作为测温元件具有较大的测量功率和额定功率
- ◎ 产品可靠性高、稳定性好

● Features

- ◎ Compact size, automated production, good consistency, and high interchangeability.
- ◎ Can operate in high current and high voltage applications as a compensation component.
- ◎ As a temperature sensing element, it offers high permissible measurement power and a high rated power.
- ◎ High product reliability and good stability.

● 安规认证 Certifications



UL1434 认证
UL1434 Certification
(File# E240991)



CQC认证
CQC Certification
(File# 13001089724)



TUV认证
TUV Certification
(File# R50245892)

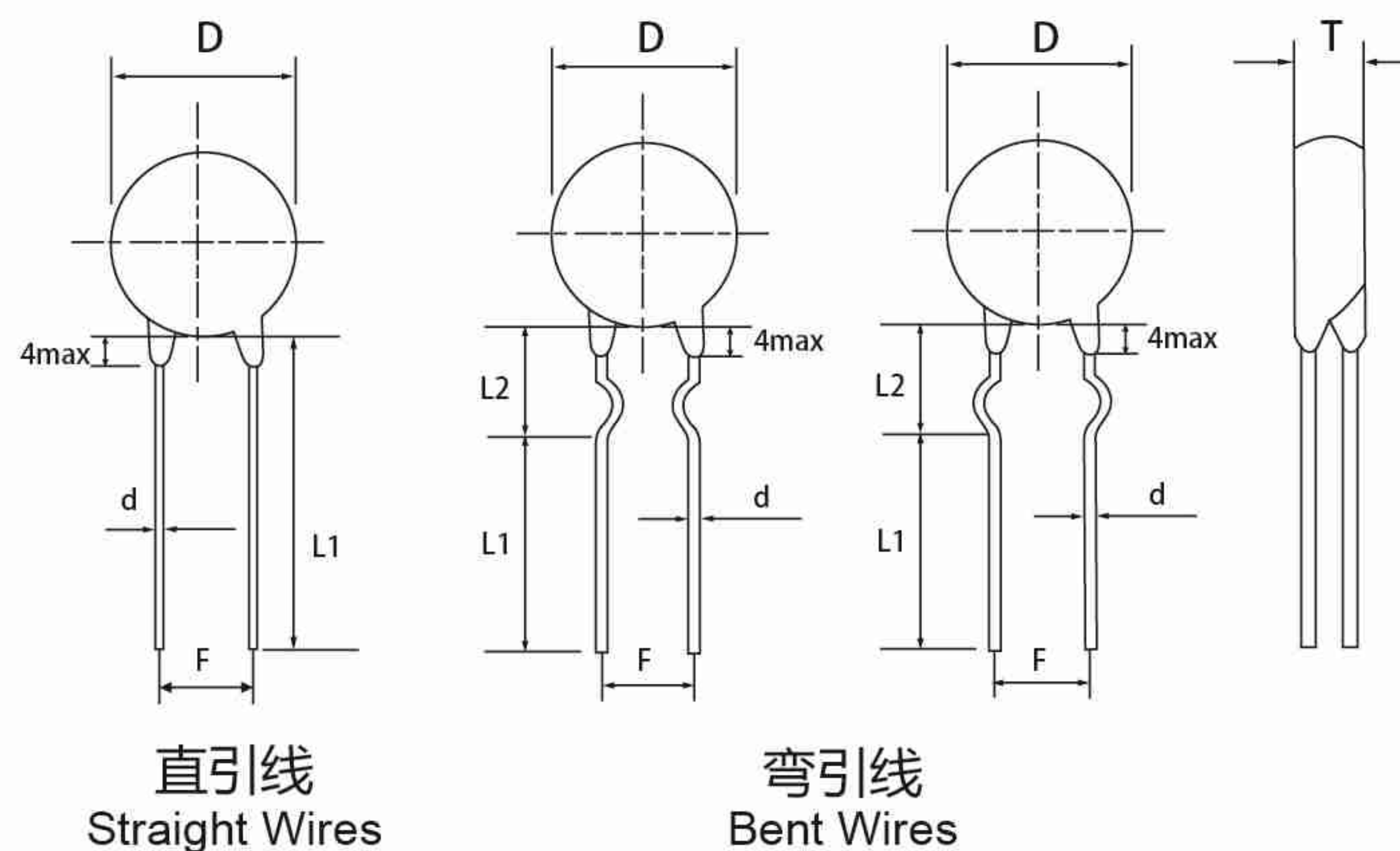
● 产品标志说明 Marking Instruction



MF11补偿型NTC热敏电阻器系列

MF11 Series MF11 Series Compensation-Type NTC Thermistor

● 外形尺寸 Dimensions (mm)



尺寸 Dim. (mm)	代号 Code	Dmax	L1min	L2±2	F±0.5	Tmax	d±0.05
引线 Leads							
直线 Straight		6	25	/	2.5	4	0.45
内弯 Inward Bent		6	20	3.5	5	4	0.6
外弯 Outward Bent		6	20	5	2.5	4	0.45

● 主要技术参数 Main Technical Specifications

- ◎ 标称阻值及允差：见下表
- ◎ B值及允差：见下表
- ◎ 时间常数约：20秒
- ◎ 耗散系数约：4.5 mW/°C
- ◎ 额定功率：450 mW
- ◎ 使用温度范围：-30°C~+125°C
- ◎ Nominal resistance value and allowable tolerance: refer to the chart below.
- ◎ B value and allowable tolerance: refer to the chart below.
- ◎ Time constant: approx. 20 s
- ◎ Dissipation constant: approx. 4.5 mW/°C
- ◎ Rated power: 450 mW
- ◎ Operating temperature range: -30°C~+125°C

● 阻值、B值一览表 Resistance Value and B-Value Chart

型 号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value	
	阻值范围 Range (Ω)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)
MF11	1.5~4.9	±5	2500	±10
	5~7		2600	
	8~24		2800	
	25~119		3000	
	120~359		3200	
	360~1400	±10	3600	
	1.5K~5.9K		3950	
	6K~12K	±15	4050	
	13K~17K		4150	
	18K~44K	±20	4250	
	45K~79K		4300	
	80K~144K		4400	
	145K~199K		4500	
	200K~299K		4600	
	300K~500K		4750	

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF51E测温型（电子体温计专用）NTC热敏电阻器系列

MF51E Series Temperature-Measurement NTC Thermistor for Electronic Thermometers

● 应用范围

- 电子体温计
- 医疗设备

● Applications

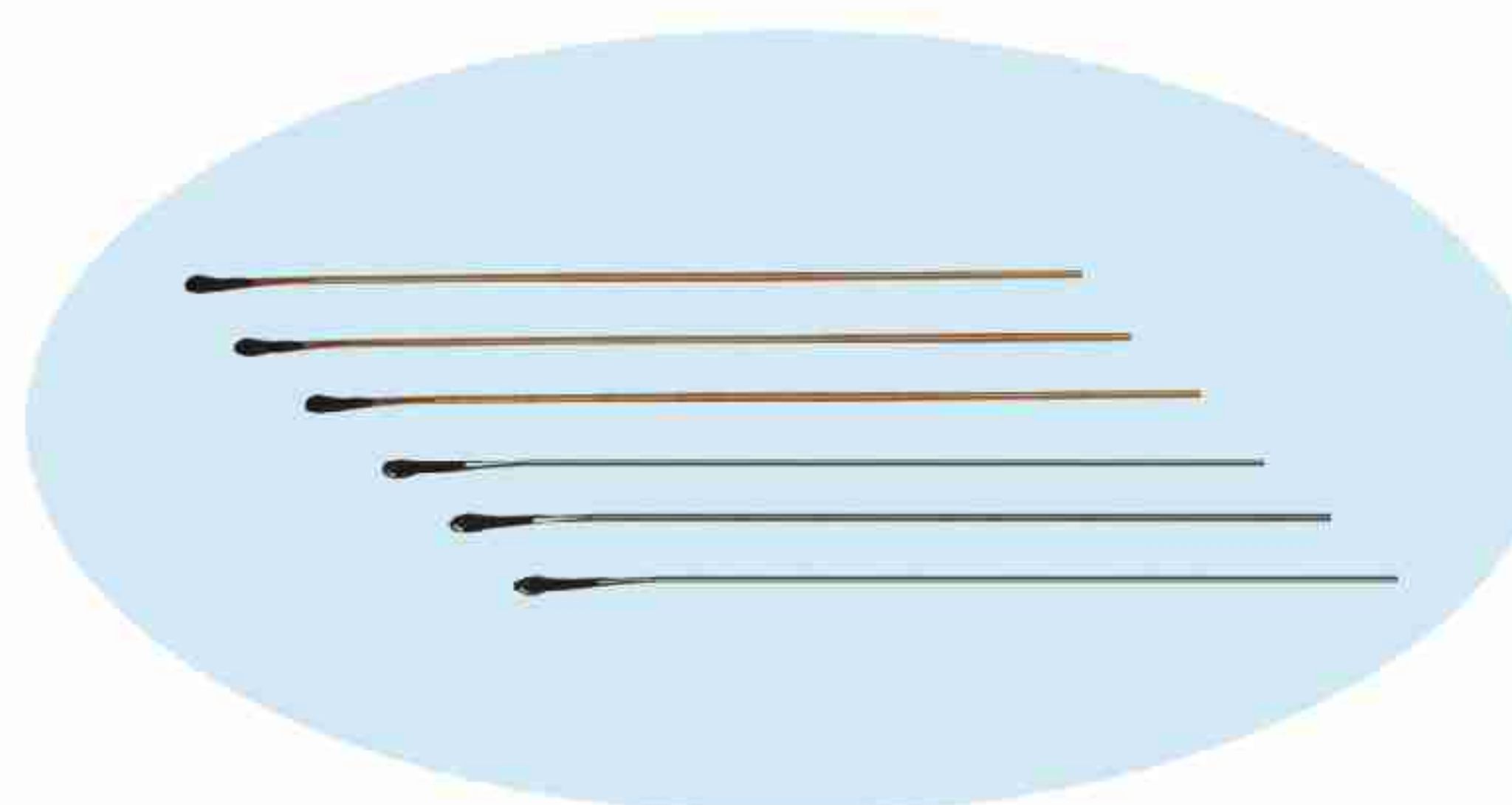
- Electronic thermometers
- Medical devices

● 特点

- 体积小、重量轻
- 热感应快、灵敏度高
- 结构稳定、可靠性高
- 阻值精度高、一致性好

● Features

- Compact size and lightweight.
- Fast thermal response and high sensitivity.
- Stable structure and high reliability.
- High resistance accuracy and good consistency.



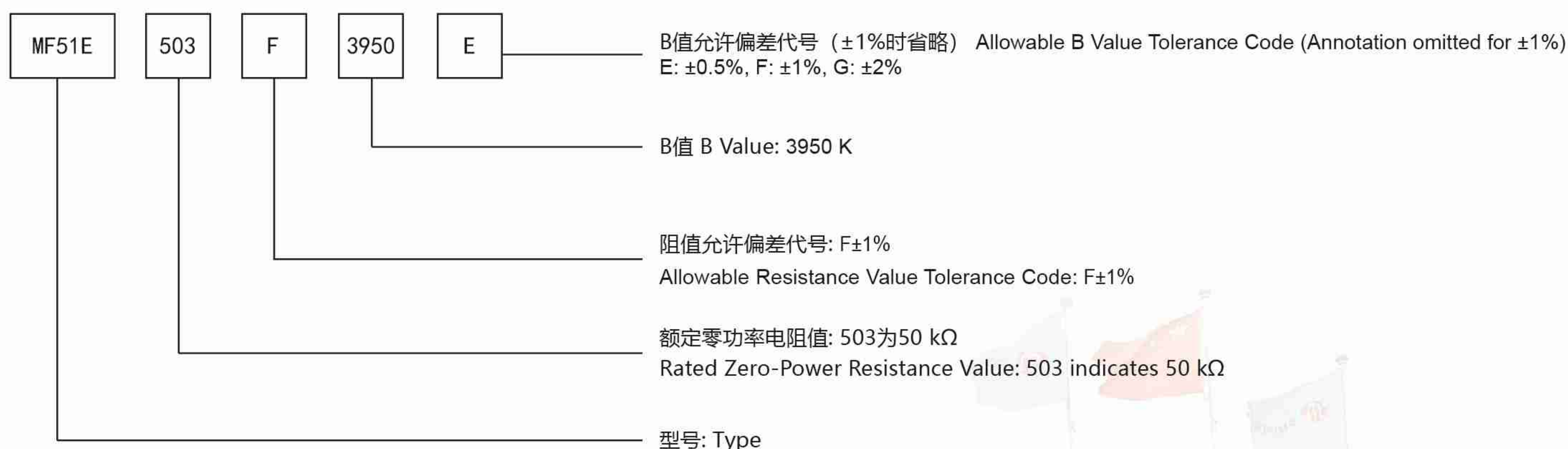
国家创新基金立项产品

National Innovation Fund Project Product

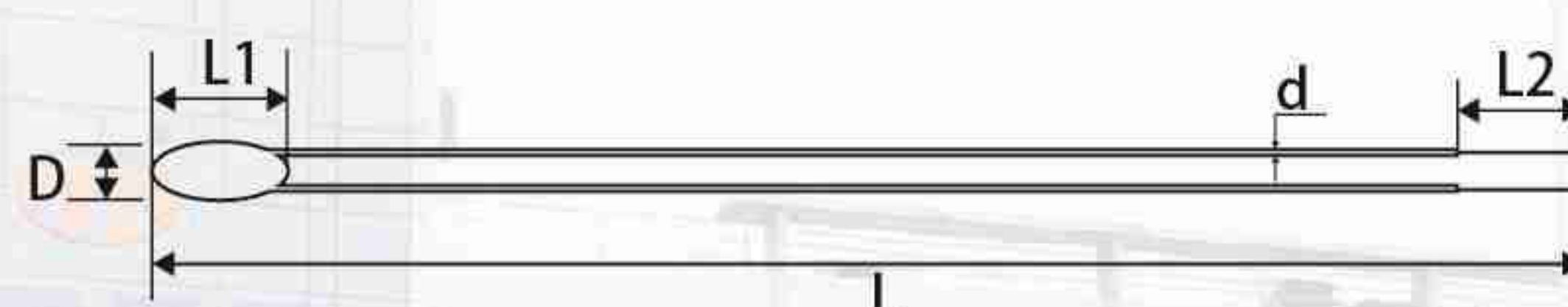
江苏省高新技术产品

High-Tech Product in Jiangsu Province

● 产品标志说明 Marking Instruction



● 外形尺寸 Dimensions (mm)



外形尺寸 Dimension	Dmax	L1max	L±3	L2±1	d±0.01
常规尺寸 Standard Dimensions	0.7	2.0	100	3	0.1
	1.1	4.0	87/100	3	0.18
特殊尺寸 Custom Dimensions	用户确定 To be determined by the user				

头部水滴形，径向引出线，表面涂覆(或包封)绝缘结构
Droplet-shaped head with radial leads, surface coated or encapsulated in insulating material

MF51E测温型（电子体温计专用）NTC热敏电阻器系列

MF51E Series Temperature-Measurement NTC Thermistors for Electronic Thermometers

● 主要技术参数 Main Technical Specifications

工作温度 Operating Temperature (°C): -40~+100°C

型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R25		B值(25/50°C) B Value (25/50°C)		耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	25°C时最大额定功耗 Max. Power Rating at 25°C
	阻值范围 Range (kΩ)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	δ (mW/°C)	τ (s)	Pmax (mW)
MF51E□□ 3270	0.2 ~ 20	E: ±0.5 F: ±1 G: ±2 H: ±3 J: ±5	3270	E: ±0.5 F: ±1	约0.5 mW/°C (头部≤ 0.7 mm 在油中) About 0.5 mW/°C (Head≤ 0.7 mm in oil)	约0.6 s (头部≤ 0.7 mm 在油中) About 0.6 (Head≤ 0.7 mm in oil)	3.5
MF51E□□ 3380	0.5 ~ 50		3380				
MF51E□□ 3470	0.5 ~ 50		3470				
MF51E□□ 3600	1 ~ 100		3600				
MF51E□□ 3950	5 ~ 100		3950				
MF51E□□ 4000	5 ~ 100		4000				
MF51E□□ 4050	5 ~ 200		4050				
MF51E□□ 4150	10 ~ 250		4150				
MF51E□□ 4300	20 ~ 1000		4300				
MF51E□□ 4500	20 ~ 1000		4500				

● 对于MF51E 503F3950，详细参数如下

Detailed parameters for MF51E 503F3950 are as follows

MF51E 503F3950 37°C±0.01°C 电阻分档表 Resistance Calibration Table at 37°C±0.01°C

档 位 Calibration	阻值 Resistance (kΩ)			档 位 Calibration	阻值 Resistance (kΩ)			档 位 Calibration	阻值 Resistance (kΩ)		
	最小值min	中间值mid	最大值max		最小值min	中间值mid	最大值max		最小值min	中间值mid	最大值max
A	29.614	29.629	29.644	L	29.955	29.970	29.985	W	30.296	30.311	30.326
B	29.645	29.660	29.675	M	29.986	30.001	30.016	X	30.327	30.342	30.357
C	29.676	29.691	29.706	N	30.017	30.032	30.047	Y	30.358	30.373	30.388
D	29.707	29.722	29.737	O	30.048	30.063	30.078	Z	30.389	30.404	30.419
E	29.738	29.753	29.768	P	30.079	30.094	30.109	A1	30.420	30.435	30.450
F	29.769	29.784	29.799	Q	30.110	30.125	30.140	A2	30.451	30.466	30.481
G	29.800	29.815	29.830	R	30.141	30.156	30.171	A3	30.482	30.497	30.512
H	29.831	29.846	29.861	S	30.172	30.187	30.202	C1	29.521	29.536	29.551
I	29.862	29.877	29.892	T	30.203	30.218	30.233	C2	29.552	29.567	29.582
J	29.893	29.908	29.923	U	30.234	30.249	30.264	C3	29.583	29.598	29.613
K	29.924	29.939	29.954	V	30.265	30.280	30.295				

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF52珠状测温型NTC热敏电阻器系列

MF52 Series Bead-Type Temperature Measurement NTC Thermistors

通过AEC-Q200检测
AEC-Q200 Qualified



江苏省高新技术产品 High-Tech Product in Jiangsu Province
国家火炬计划项目产品 National Torch Program Product

● 应用范围

- 空调设备
- 暖气设备
- 电子体温计
- 液位传感器
- 汽车电子
- 电子台历
- 手机电池

● Applications

- Air conditioning systems.
- Heating equipments.
- Electronic thermometers.
- Liquid level sensors.
- Automotive electronics.
- Electronic desk calendars.
- Mobile phone batteries.

● 特点

- 测试精度高
- 体积小、反应速度快
- 能长时间稳定工作
- 互换性、一致性好
- 规模化生产、性价比高

● Features

- High testing accuracy.
- Compact size and fast response time.
- Stable operation over long periods.
- Good interchangeability and consistency.
- Mass production and high cost-performance ratio.

● 安规认证 Certifications



UL1434 认证
UL1434 Certification
(File# E240991)

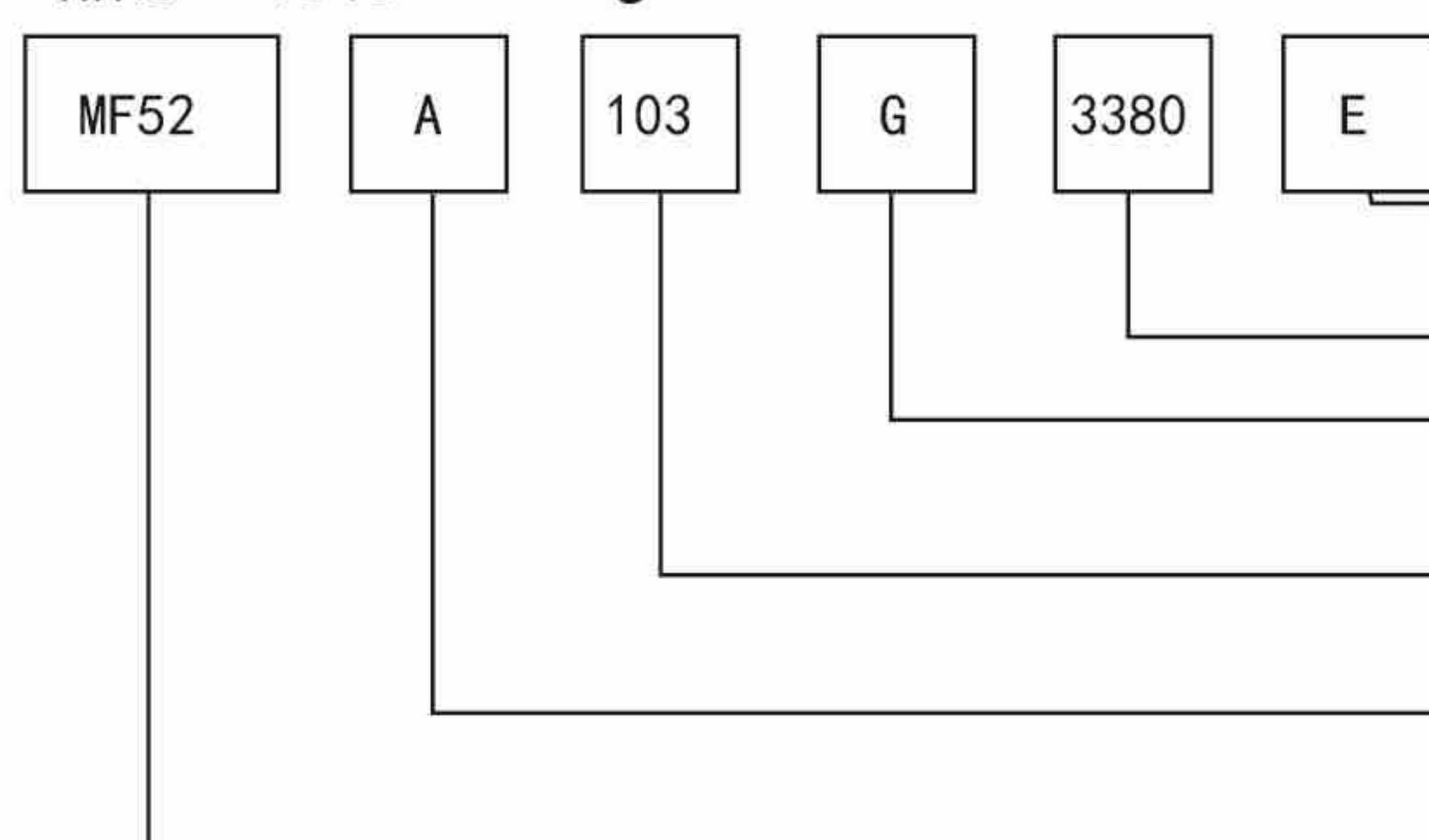


CQC 认证
CQC Certification
(File# 07001019009)



TUV 认证
TUV Certification
(File# R50245892)

● 产品标志说明 Marking Instruction



B值允许偏差代号 (±1%时省略)
Allowable B Value Tolerance Code (Annotation omitted for ±1%)
E: ±0.5%, F: ±1%, G: ±2%
B值: 3380 K B Value: 3380 K
阻值允许偏差代号: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%
Allowable Resistance Value Tolerance Code: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%
额定零功率电阻值: 103为10 KΩ
Rated Zero-Power Resistance Value: 103 indicates 10 kΩ
不同外型结构和尺寸代号: A型引线为镀锡铜线或镀锡铜包钢线
Different Dimensions Code: e.g., A leads are tin-plated copper wire or tin-plated copper-clad steel wire
型号: 珠状测温型NTC热敏电阻器
Type: Bead-Type Temperature-Measurement NTC Thermistor

● 主要技术参数 Main Technical Specifications

型号 Part No.	25℃的零功率电阻值 Zero-Power Resistance at 25℃	B值 (25/50℃) B Value (25/50℃)	25℃时最大额定功耗 Max. Power Rating at 25℃	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	工作温度 Operating Temperature
	R25	(K)	Pmax (mW)	δ (mW/℃)	T (s)	(℃)
MF52□□□3100	0.1~20	3100	10~100	2~10 mW/℃ (静止空气中)	2s ~ 12s (静止空气中)	-55 ~ +150
MF52□□□2700	0.2~20	3270				
MF52□□□3380	0.5~50	3380				
MF52□□□3470	0.5~50	3470				
MF52□□□3600	1~100	3600				
MF52□□□3950	5~100	3950				
MF52□□□4000	5~100	4000		2~10 mW/℃ (In still air)	2s ~ 12s (In still air)	
MF52□□□4050	5~200	4050				
MF52□□□4150	10~250	4150				
MF52□□□4300	20~1000	4300				
MF52□□□4500	20~1000	4500				

详见产品规格书 Please refer to the Approval Datasheet

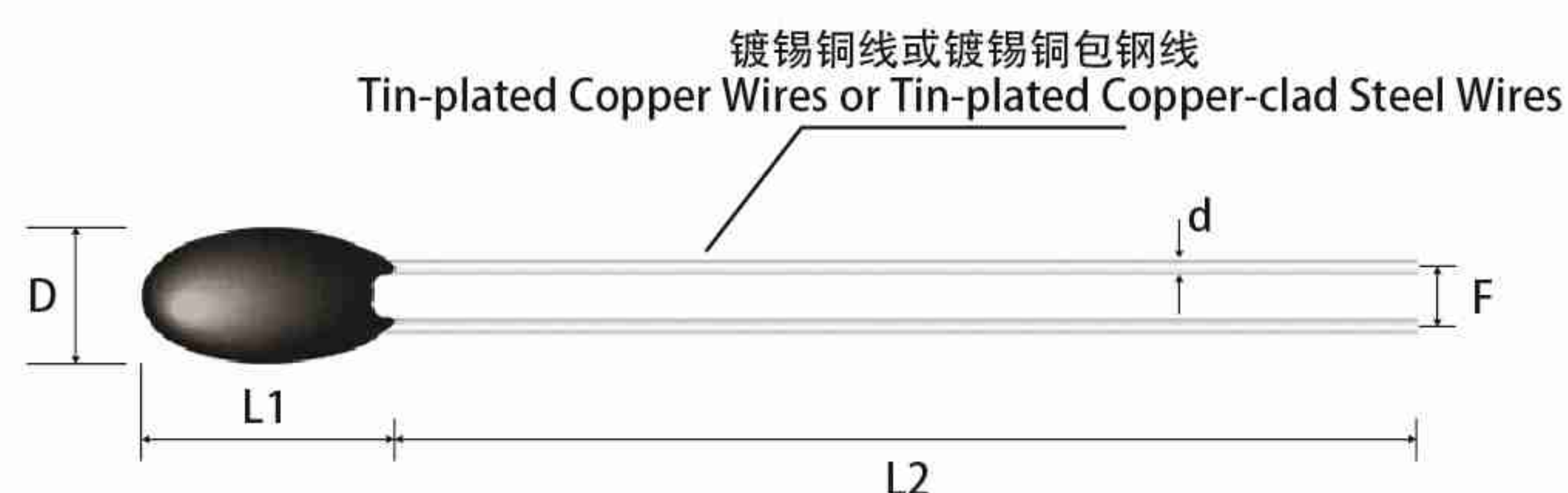
MF52珠状测温型NTC热敏电阻器系列

MF52 Series Bead-Type Temperature-Measurement NTC Thermistor

● 外形结构和尺寸 Dimensions (mm)

A型: 引线为镀锡铜线或镀锡铜包钢线

A type: Tin-plated Copper Wires or Tin-plated Copper-clad Steel Wires

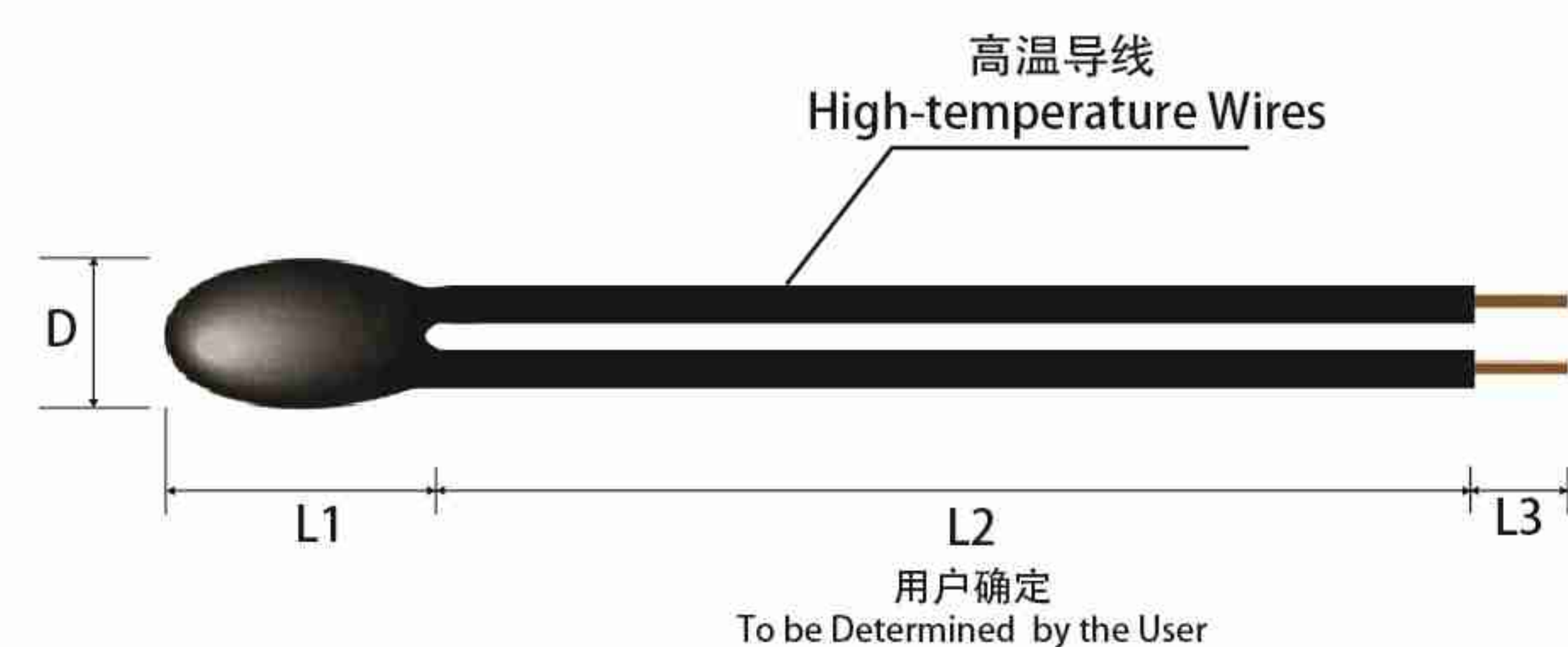


常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2min	d±0.05	F
A ₀	1.8	4.0	25	0.3	0.6±0.3
A ₁	2.5	4.0	25	0.3	1.7±0.5
A ₂	3	4.5	25	0.45	2.2±0.5

C型: 引线为高温导线

C type: High-temperature Wires

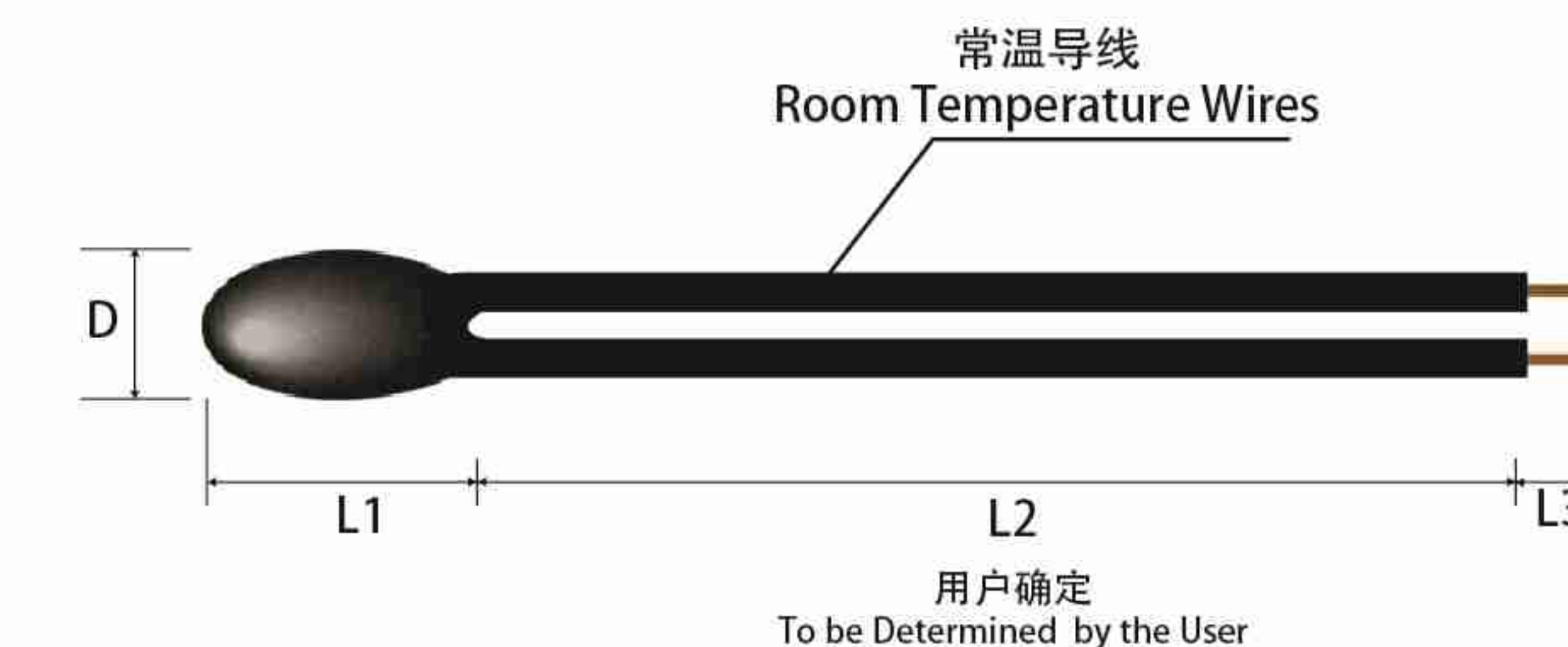


常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2min	L3±1	线材型号 Wires Type
C ₁	3	7.5	用户确定 To be Determined by the User	5	30#
C ₂	4	7.5	用户确定 To be Determined by the User	5	28#

D型: 引线为常温导线

D type: Standard Temperature Wires

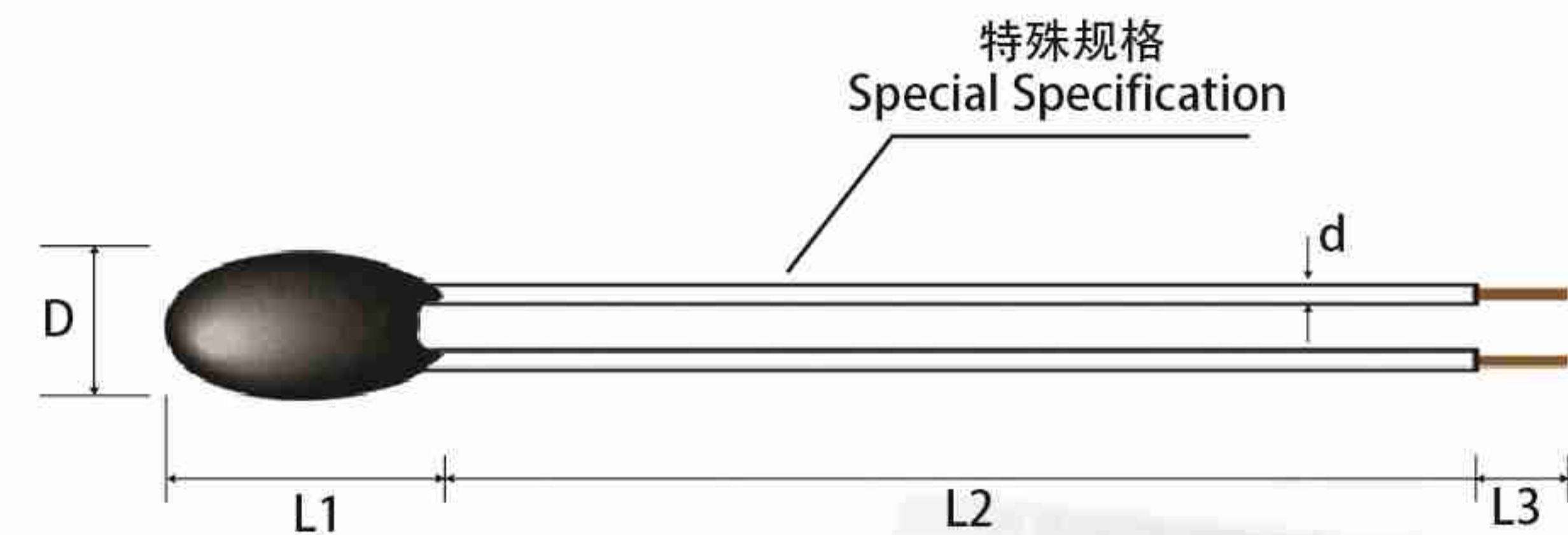


常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2min	L3±1	线材型号 Wires Type
D ₁	3	7.5	用户确定 To be Determined by the User	5	30#
D ₂	4	7.5	用户确定 To be Determined by the User	5	28#

E型: 引线 and 包封头均为特殊规格

E type: Wires and Encapsulation Heads are of Special Specifications

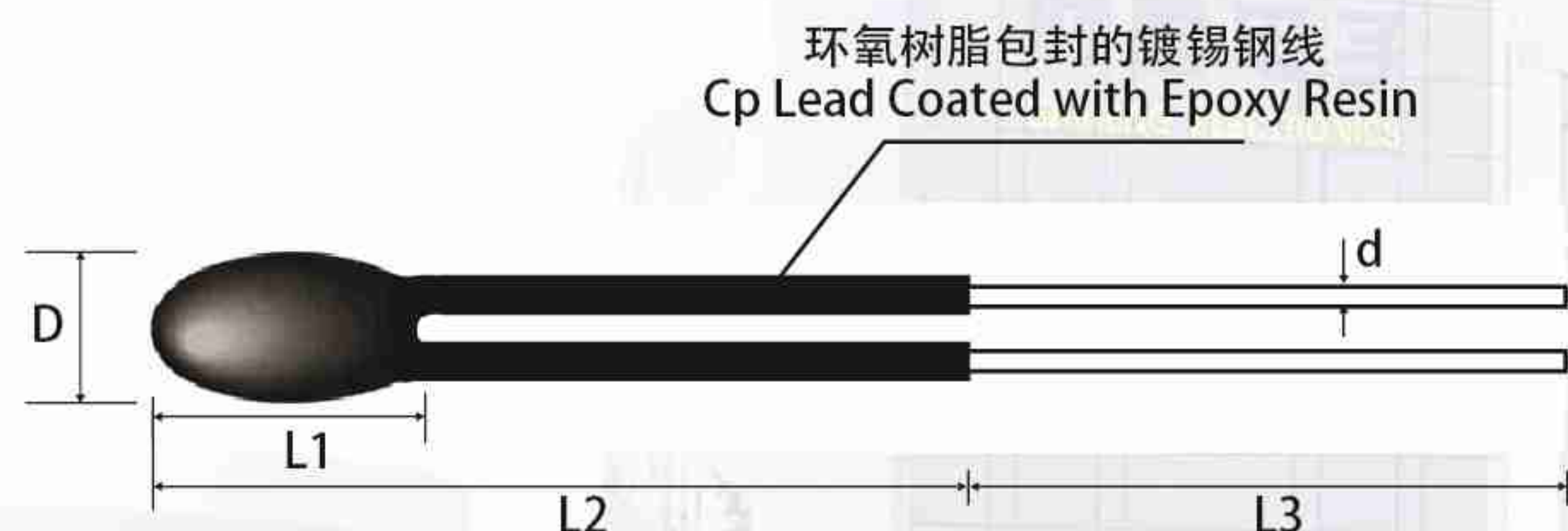


常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2min	L3±1	线材型号 Wires Type
E ₁	用户确定 To be Determined by the User			5	用户确定 To be Determined by the User
E ₂				5	用户确定 To be Determined by the User

DE型-环氧树脂包封的镀锡线

DE type: Epoxy Resin Encapsulated Tinned Wires

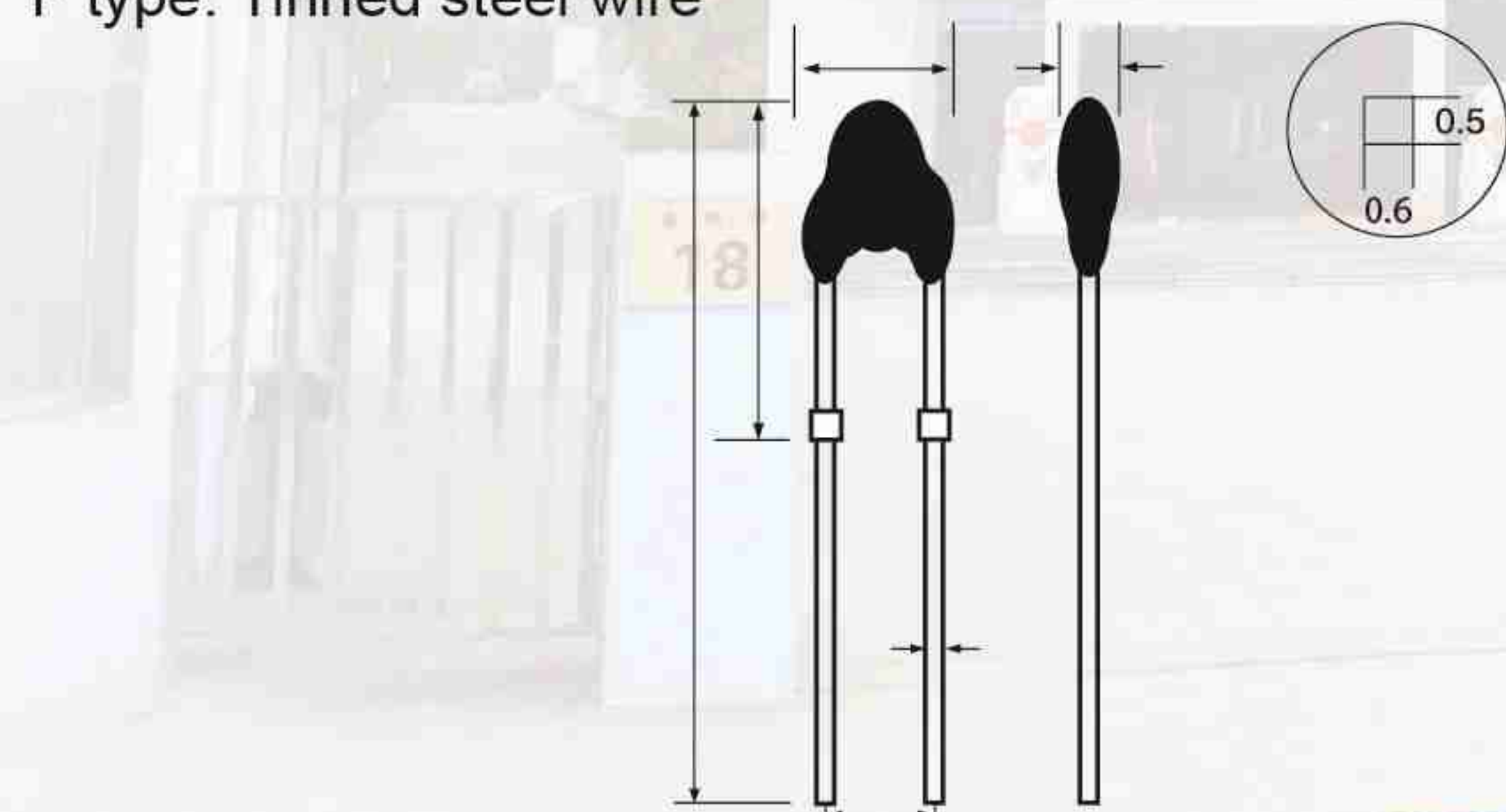


常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2max	L3	d±0.05	F±0.5
DE ₁	3	6.0	55	用户确定 To be Determined by the User	0.3	/
DE ₂	4	7.5	35	用户确定 To be Determined by the User	0.45	/

F型: 引线为镀锡钢线

F type: Tinned steel wire



常规尺寸表
Standard Dimension Table

代号 Code	Dmax	L1max	L2±1.5	d±0.1	F±0.5	T max
F	3.8	9.5	17	0.6	2.5	3.5

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 Thermistors (Customizable)

通过AEC-Q200检测
AEC-Q200 Qualified

● 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℃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-clad or steel-clad wires, 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 to 180°C.
- We provide products with high insulation, high withstand voltage, and high reliability.
- Mass production and high cost-performance ratio.

● 产品标志说明 Marking Instruction

MF52 B 103 F 3950 F A CP Z 0180 (T₁)

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: 3950 K

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10 KΩ
Rated Zero-Power Resistance Value: 103 indicates 10 kΩ

引线:漆包线 Wires: Enameled Wires

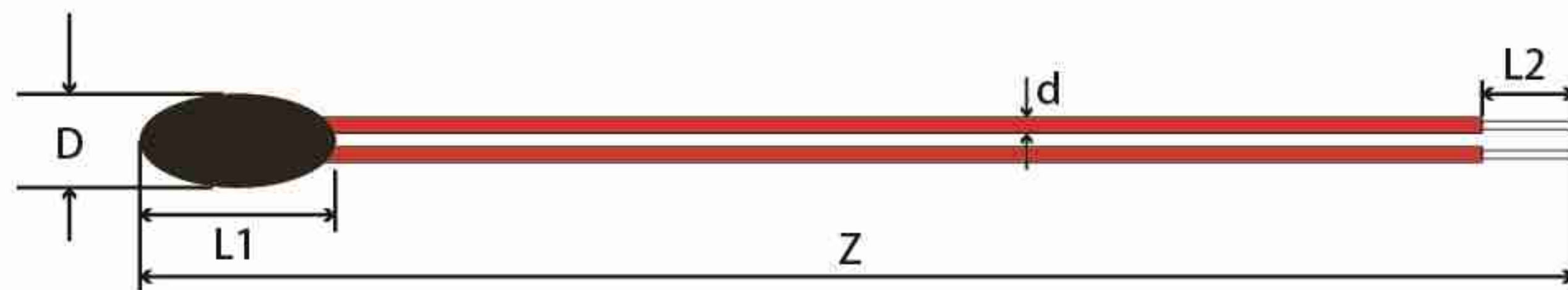
型号:MF52系列 Type:MF52 Series



● 安规认证 Certifications



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



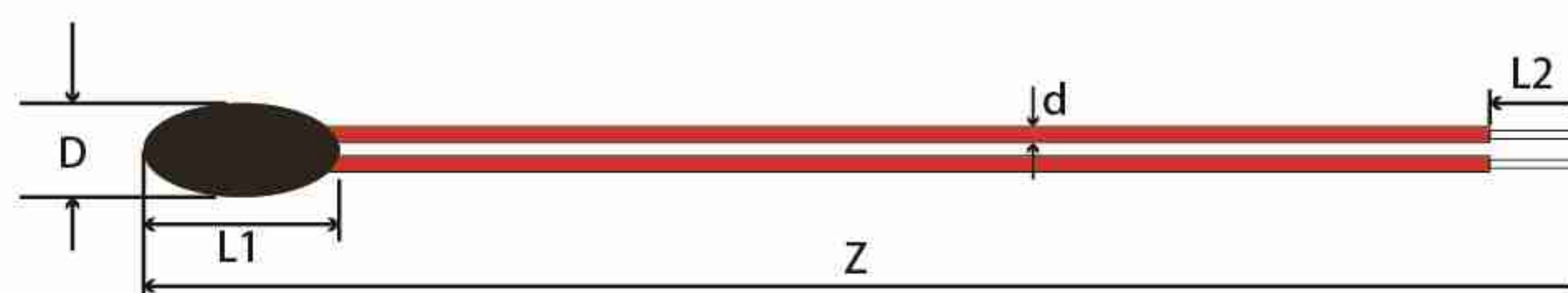
代码 Code	D(普通) Standard	L ₁	Z±2	L ₂ ±0.5	d	线材种类 Type of wire	25℃时最大额定功耗 Max. Power Rating at 25℃	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	工作温度 Operating Temperature
							P _{max} (mW)	δ (mW/℃)	τ (s)	(℃)
A	1.0 (-0.2/+0)	≤4.0	35 mm 40 mm 50 mm 60 mm	3.0	0.17	CP 漆包线 CP Enameled Wire	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 Wire	3	0.6	2	
C	1.2 (±0.15)	≤4.0		2.0	0.23	CP/Cu 漆包线 CP/Cu Enameled Wire	3	0.6	2	
D *	1.25 (±0.15)	≤5.0		2.0	0.28	CP/Cu 漆包线 CP/Cu Enameled Wire	3	0.6	4	
E	1.4 (±0.2)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wire	3	0.6	4	
F	1.6 (±0.3)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wire	7.5	1.5	7	
G	1.8 (±0.3)	≤5.0		2.0	0.30	CP/Cu 漆包线 CP/Cu Enameled Wire	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 (非标准定制产品总长: 12-245 mm)

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

● 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	L ₁	Z±2	L ₂ ±0.5	d	线材种类 Type of wire	25℃时最大额定功耗 Max. Power Rating at 25℃	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	工作温度 Operating Temperature
							P _{max} (mW)	δ (mW/℃)	τ (s)	(℃)
H	1.5 (±0.3)	≤6.0	35 mm 40 mm	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	50 mm 60 mm	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	T ₁ (高温/高湿) T ₁ High Temperature/High Humidity	T ₂ (高温/高压) T ₂ High Temperature/High Voltage	T ₃ (高温/高湿/高压) T ₃ 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℃/85%RH 1000h (ΔR/R≤±5%, ΔB/B≤±1%) 水煮试验 500h (ΔR/R≤±5%, ΔB/B≤±1%) Bolling Water Test, 500 hours 年漂移率ΔR/R≤±0.1% Annual Drift Rate ΔR/R≤±0.1%	1500 VAc 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%	1500 VAc 高低温冲击 100次循环 (ΔR/R≤±5%, ΔB/B≤±1%) High-Low Temperature Shock 100 cycles 85℃/85%RH 1000h (ΔR/R≤±5%, ΔB/B≤±1%) 水煮试验 500h (ΔR/R≤±5%, ΔB/B≤±1%) Bolling Water 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℃~+150℃, 短时间180℃ Operating Temperature Range: -40℃ to 150℃, short-term exposure up to 180℃		

技术性能指标、线径、线长可定制 (非标准定制产品总长: 12-245 mm)

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

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF54塑封测温型NTC热敏电阻器系列

MF54 Series Plastic-Encapsulated Temperature-Measurement NTC Thermistor

● 特点

- 测温精度高、稳定性好、阻值范围宽
- 体积小、反应速度快、灵敏度高
- 大规模生产，低成本
- 轴型封装，便于AI自动化安装

● Features

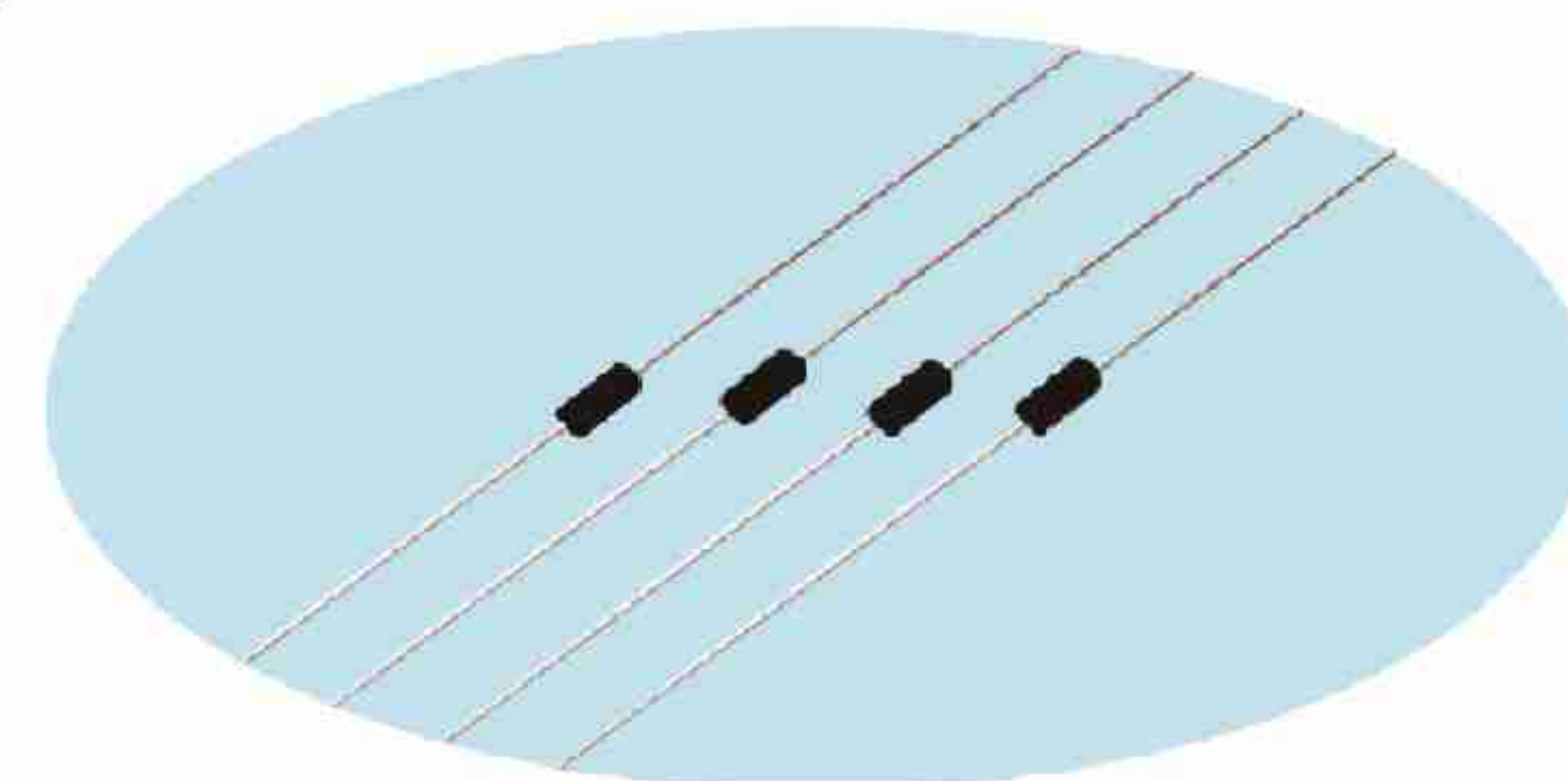
- High temperature measurement accuracy, excellent stability, and wide resistance range.
- Compact size, fast response, and high sensitivity.
- Mass production, low cost, and high cost-performance ratio.
- Axial packaging, suitable for automated installation.

● 应用范围

- 汽车电子（车载空调、冰箱等）
- 办公设备（电脑、打印机等）
- 可充电电池（锂电池、镍氢电池等）

● Applications

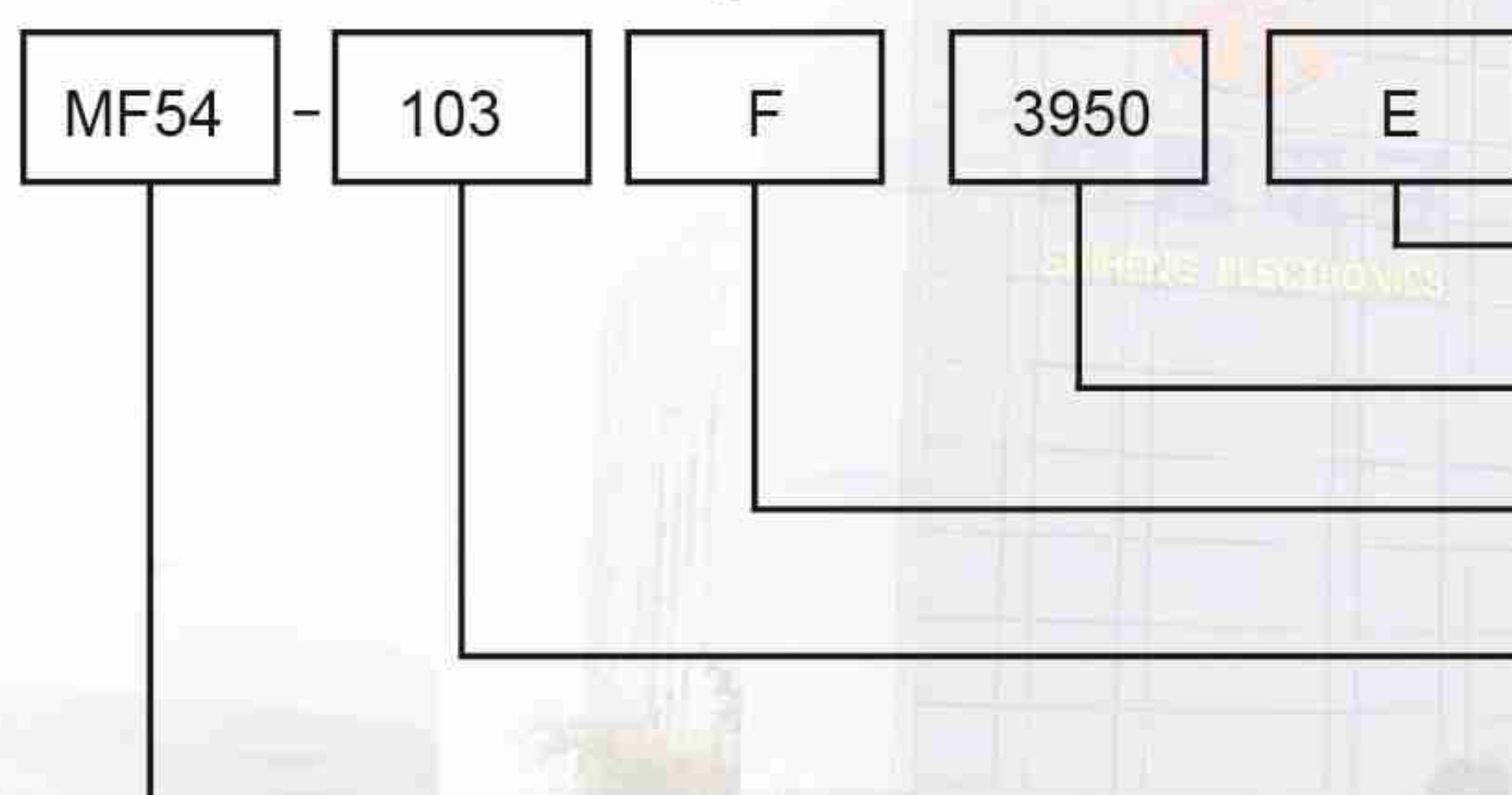
- Automotive electronics (vehicle air conditioners, refrigerators, etc.)
- Office equipment (computers, printers, etc.)
- Rechargeable batteries (lithium batteries, nickel-metal hydride batteries, etc.)



● 主要技术参数 Main Technical Specifications

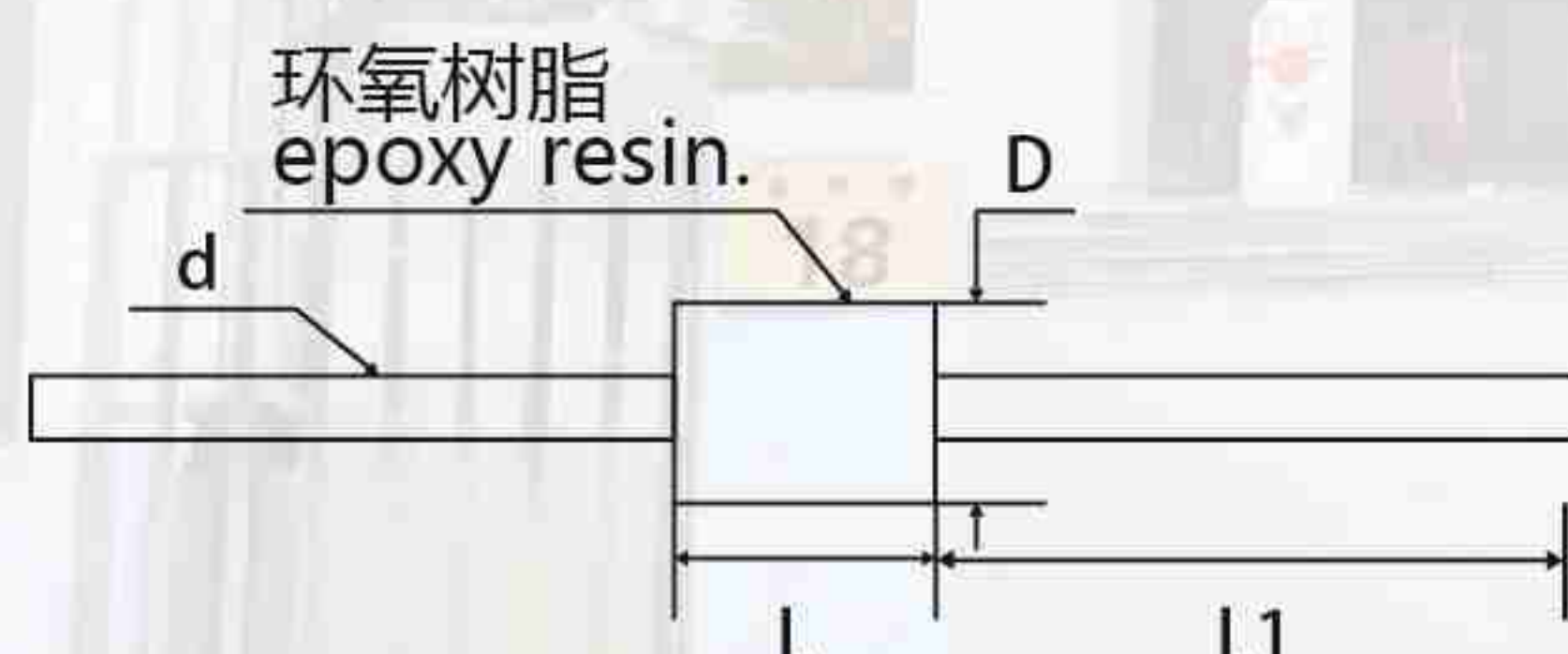
型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value (25/50°C)		热时间常数约 Thermal Time Constant Approx.	耗散系数约 Dissipation Constant Approx.	25°C时最大额定功耗 Max. Power Rating at 25°C	工作温度 Operating Temperature
	阻值范围 Range (kΩ)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	τ (s)	δ (mW/°C)	Pmax (mW)	(°C)
MF54-□□3100	0.1~20	E: ±0.5 F: ±1 G: ±2 H: ±3 J: ±5	3100	E: ±0.5 F: ±1 G: ±2	约5 mW/°C 静止空气中 About 5 mW/°C in Stil Air	约20 s 静止空气中 About 20 s in Stil Air	25	-55~+125
MF54-□□3270	0.2~20		3270					
MF54-□□3380	0.5~50		3380					
MF54-□□3470	0.5~50		3470					
MF54-□□3600	1~100		3600					
MF54-□□3950	5~100		3950					
MF54-□□4000	5~100		4000					
MF54-□□4050	5~100		4050					
MF54-□□4150	10~250		4150					
MF54-□□4300	20~1000		4300					
MF54-□□4500	20~1000		4500					

● 产品标志说明 Marking Instruction



B值允许偏差代号 (±1%时省略)
Allowable B Value Tolerance Code (Annotation omitted for ±1%)
E: ±0.5%, F: ±1%, G: ±2%
B值 B Value: 3950 K
阻值允许偏差代号: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%
Allowable Resistance Value Tolerance Code: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%
额定零功率电阻值: 103为10 kΩ
Rated Zero-Power Resistance Value: 103 indicates 10 kΩ
型号:塑封测温型NTC热敏电阻器
Type: Plastic-Encapsulated Temperature-Measurement NTC Thermistors

● 外形结构和尺寸 Main Technical Specifications



尺寸 Dim.(mm)	代号 Code	L±0.2	L1±2	D±0.2	d±0.05
型号 Part No.	MF54	5	28	2.5	0.6

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF55薄膜测温型NTC热敏电阻器系列

MF55 Series Thin Film Temperature-Measurement NTC Thermistor

● 应用范围

- 电脑
- 打印机
- 家用电器

● Applications

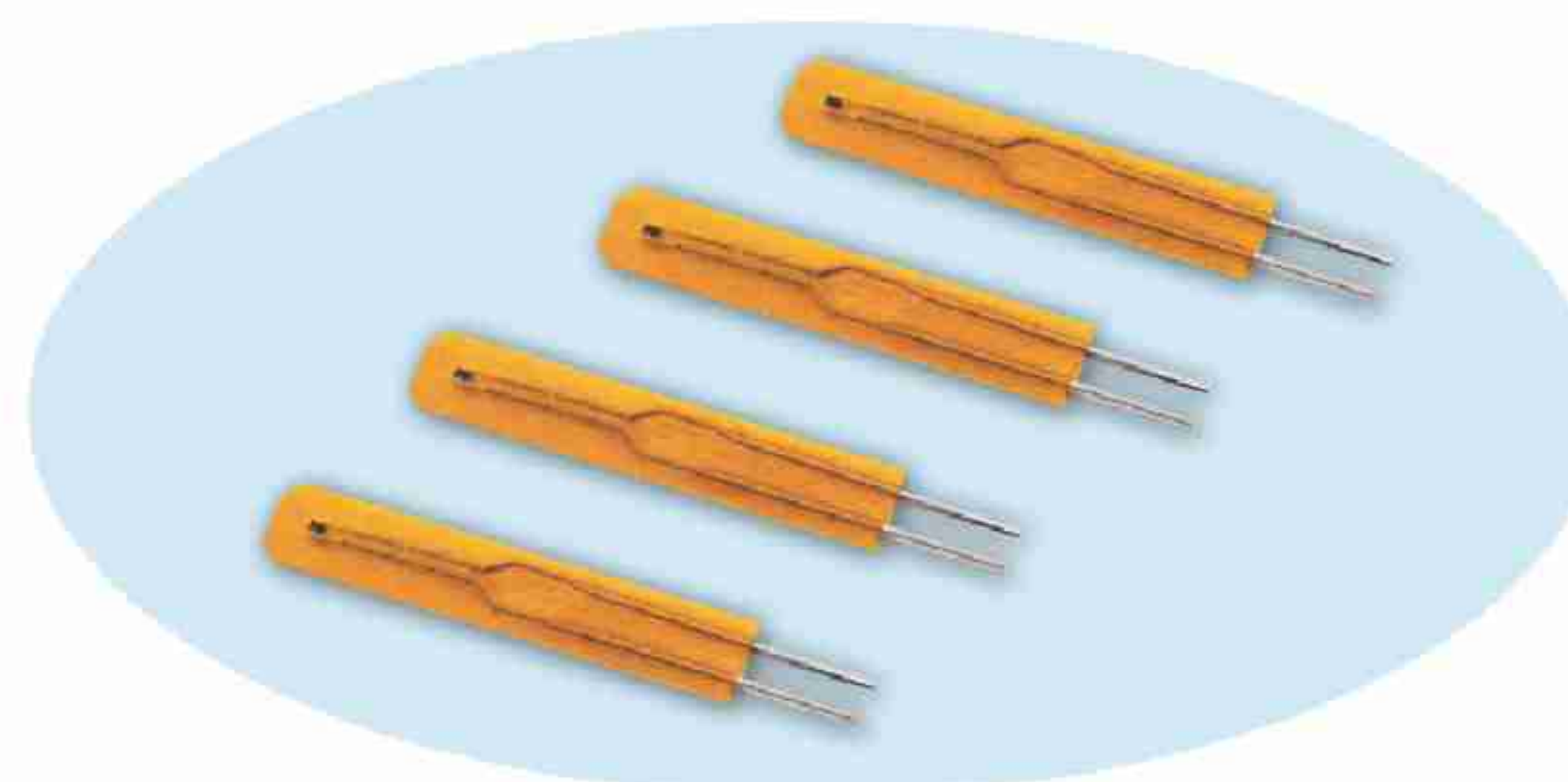
- Computers
- Printers
- Household appliances

● 特点

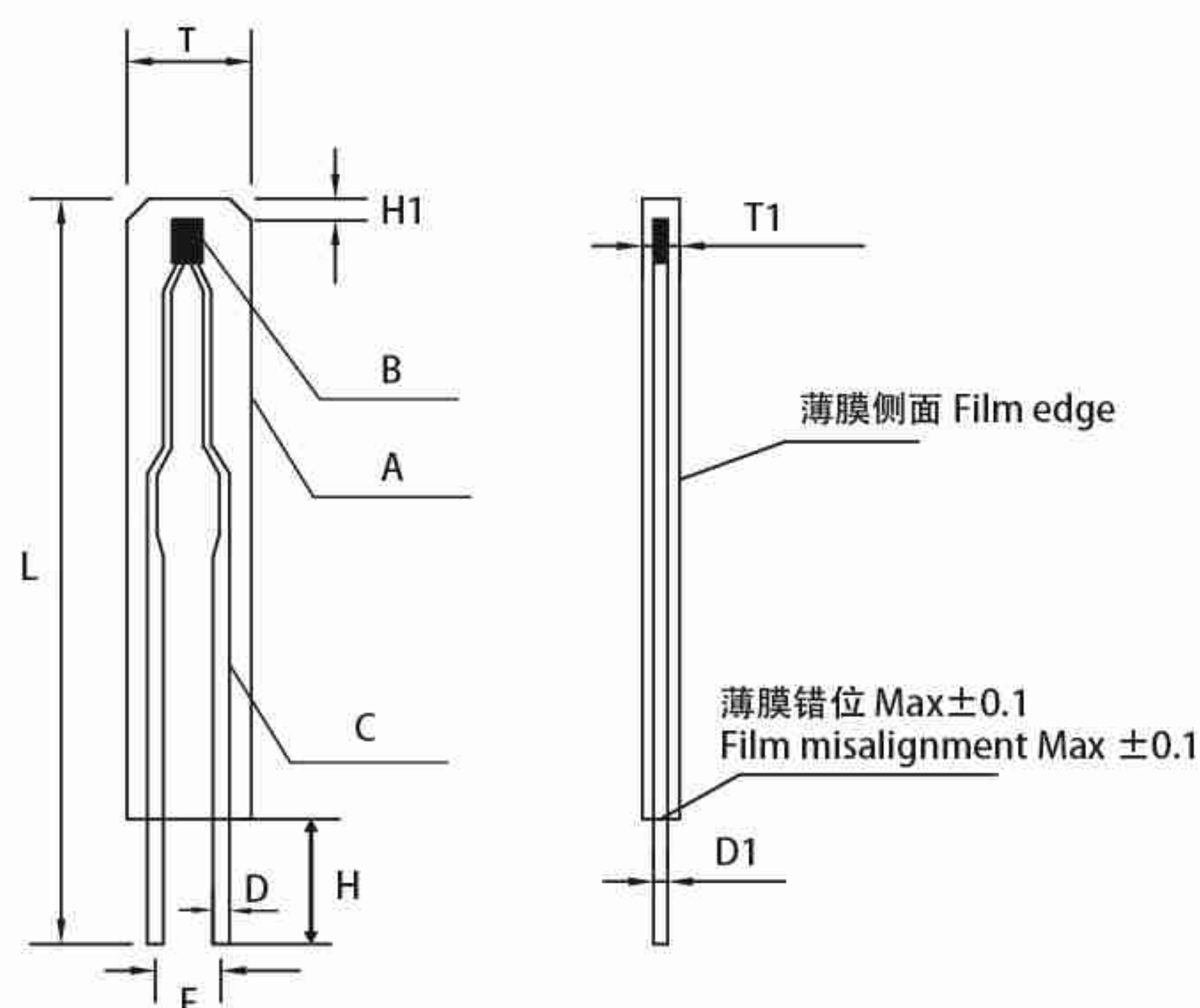
- 灵敏度高、热感应快
- 稳定性好、可靠性高
- 绝缘性好
- 阻值精度高
- 使用安全
- 体积小、重量轻、结构坚固便于自动化安装

● Features

- High sensitivity, fast thermal response.
- Excellent stability, high reliability.
- Excellent electrical insulation properties.
- High resistance value accuracy.
- Safe to use.
- Compact size, lightweight, sturdy structure, suitable for automatic installation.



● 外形结构和尺寸 Dimensions (mm)



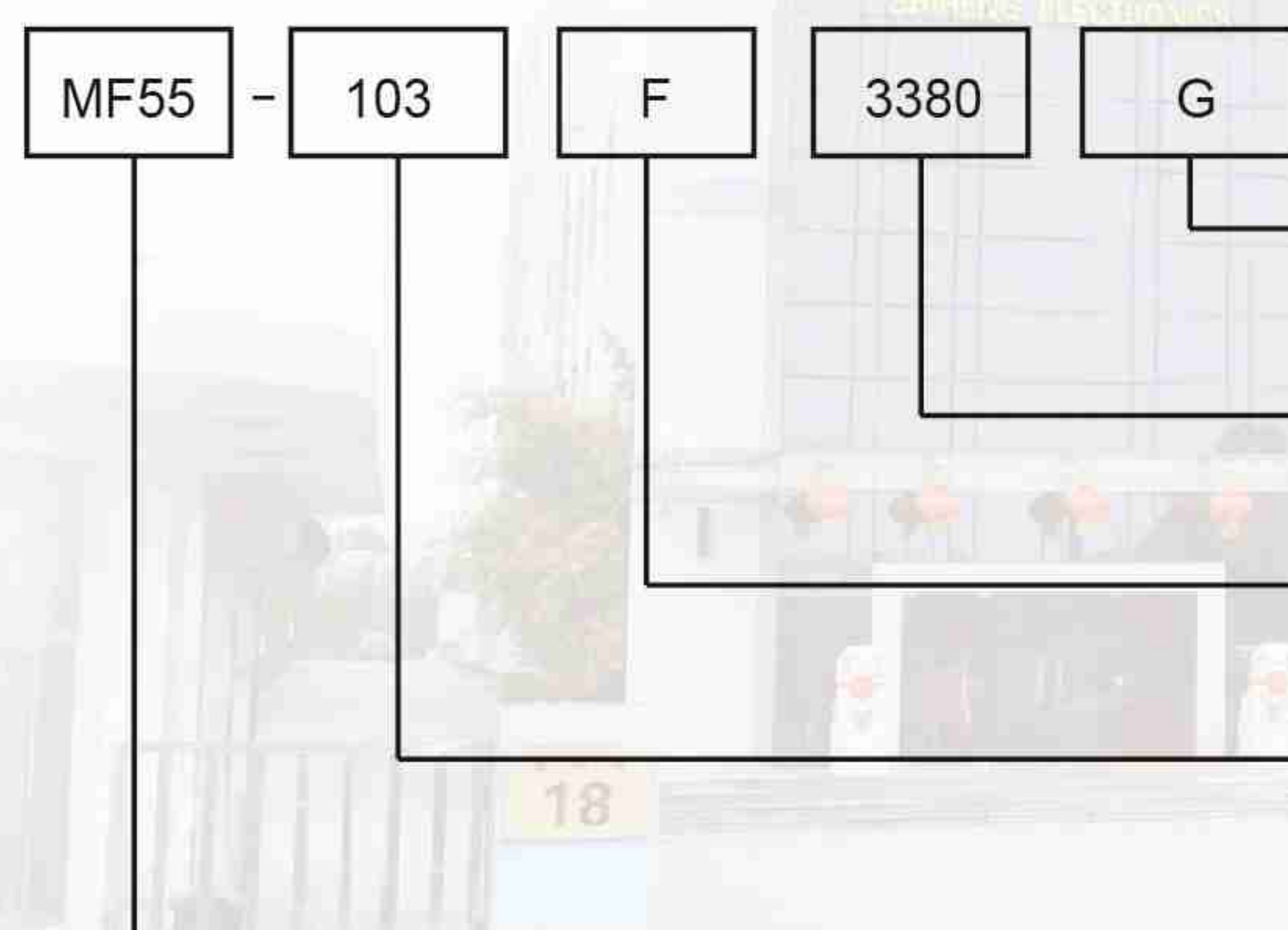
- A 聚酰亚胺膜 Polyimide film
B 芯片 Chip
C 磷铜架 Phosphor bronze frame

尺寸 Dim. (mm)	代号 Code	L	F	T	T1	H	H1	D	D1
型号 Part No.		± 1	± 0.2	max	max	± 1	± 0.05	± 0.02	± 0.02
MF55		25	2	5	0.7	5	2.5	0.5	0.15

● 主要技术参数 Main Technical Specifications

型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value (25/50°C)		耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	25°C时最大额定功耗 Max. Power Rating at 25°C	工作温度 Operating Temperature
	阻值范围 Range (kΩ)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	δ (mW/°C)	τ (s)	Pmax (mW)	(°C)
MF55-□□□□	5-500	F: ±1 G: ±2 H: ±3 J: ±5	3270~4750	F: ±1 G: ±2	约0.8m W/°C 静止空气中 About 0.8m W/°C in Stil Air	约5 s 静止空气中 About 5 s in Stil Air	50	-40~+125

● 产品标志说明 Marking Instruction



B值允许偏差代号 (±1%时省略)
Allowable B Value Tolerance Code (Annotation omitted for ±1%)
E: ±0.5%, F: ±1%, G: ±2%

B值 B Value: 3380 K

阻值允许偏差代号: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%
Allowable Resistance Value Tolerance Code: F: ±1%, G: ±2%, H: ±3%, J: ±5%, K: ±10%

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

薄膜测温型NTC热敏电阻器
Thin Film Temperature-Measurement NTC Thermistor

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF57 (汽车电子专用) 测温型NTC热敏电阻器系列

MF57 Series (Automotive Electronics-Specific) Temperature-Measurement NTC Thermistor

● 应用范围 Applications

主要用于汽车（内燃机车、大型电机、油浸变压器）的冷却系统作定点测温的感温元件，也可用在其它场合的温度测量。

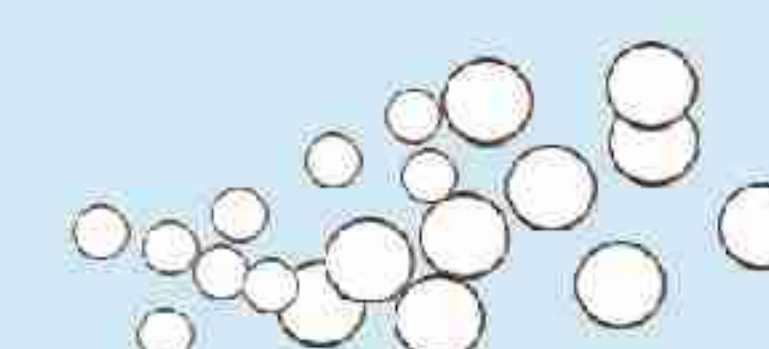
Primarily used as temperature-sensing components for point temperature measurements in automotive cooling systems including internal combustion engine vehicles, large motors, and oil-immersed transformers. Suitable for a variety of other temperature measurement applications.

● 特点 Features

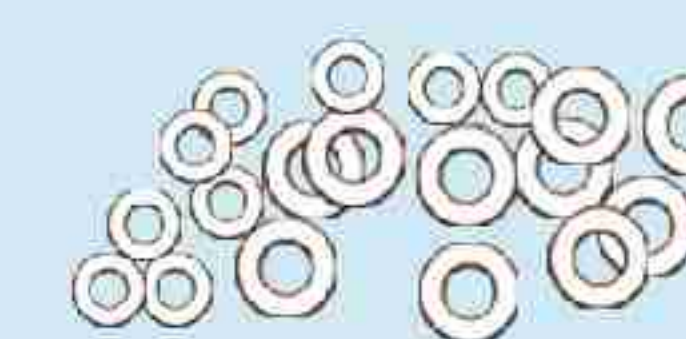
标称阻值与B值误差范围小，产品一致性、互换性好，可与各种国产及进口汽车仪表配套。

The nominal resistance and B value exhibit minimal deviation, ensuring excellent product consistency and interchangeability. Compatible with a wide range of domestic and imported automotive instrumentations.

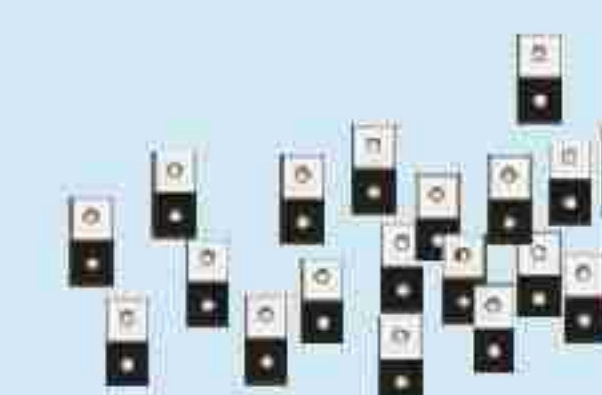
● 产品标志说明 Marking Instruction



MF57A

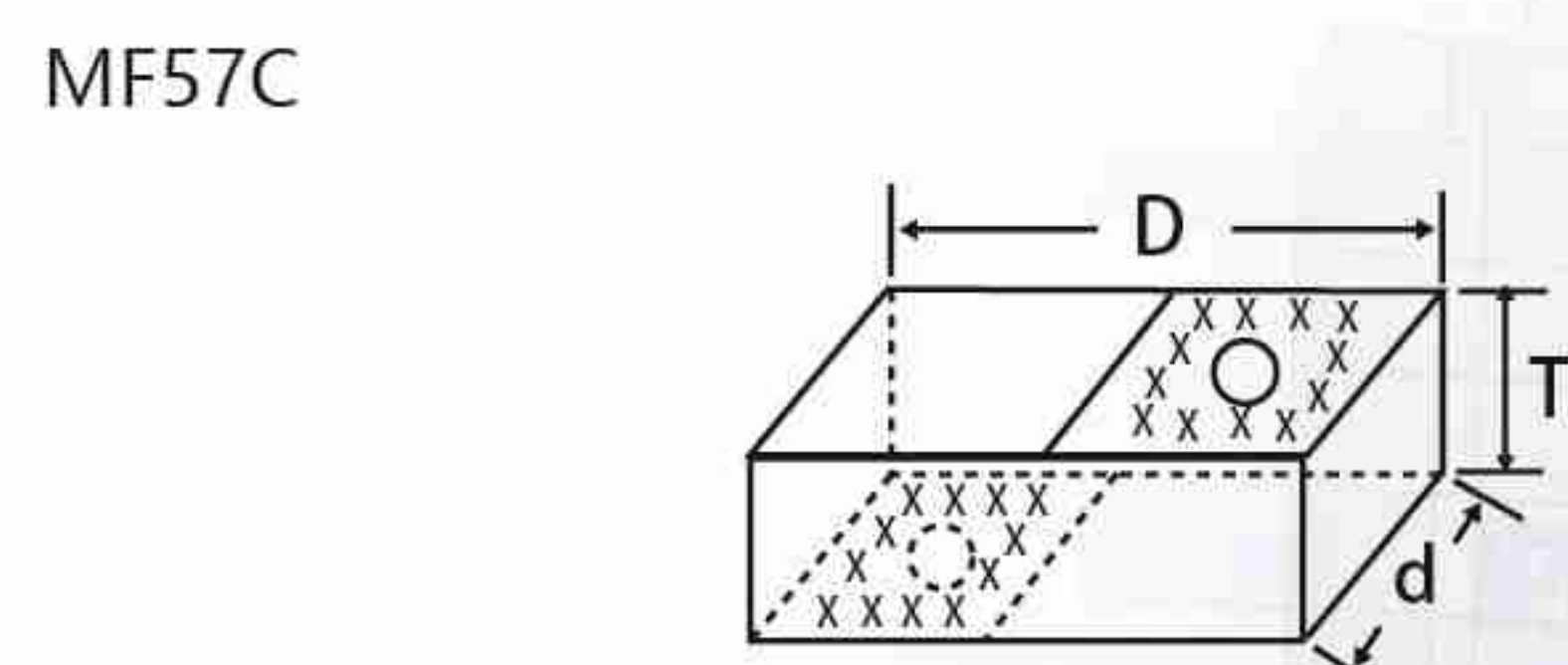
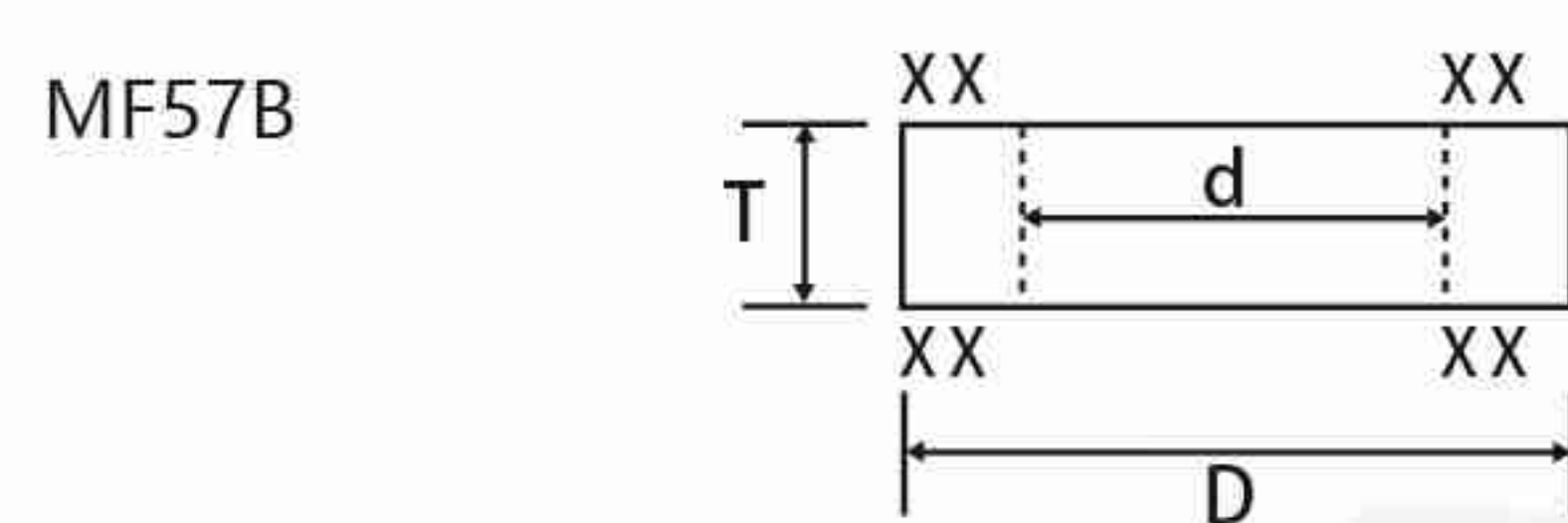
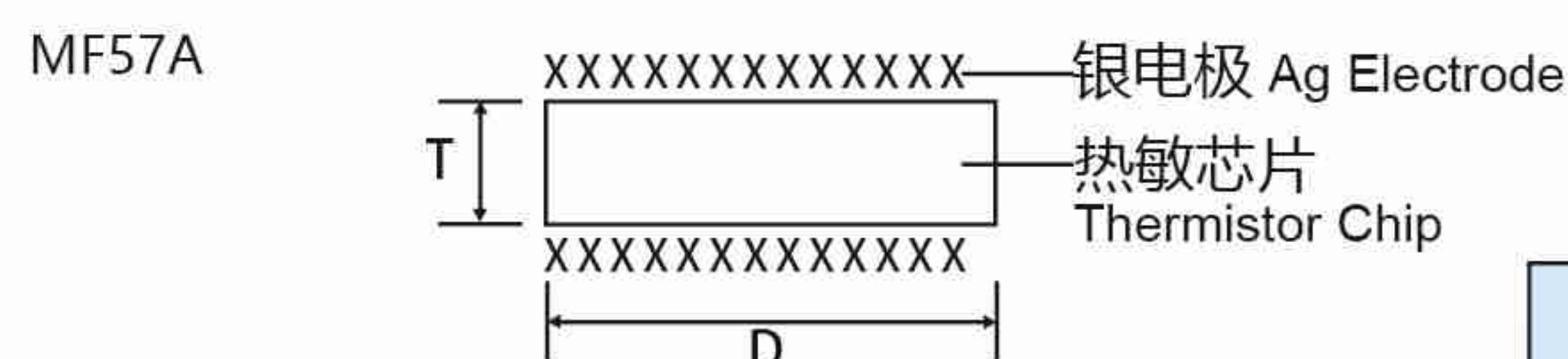


MF57B



MF57C

● 外形结构和尺寸 Main Technical Specifications



尺寸 Dim.(mm)	代号 Code	D±0.5	T±0.2	d±0.5
型号 Part No.				
MF57A		4.5 ~ 1.0	1.0~3.0	/
MF57B		6.6	1.6	3.6
MF57C		5	1.5~2.0	3

● 主要技术参数 Main Technical Specifications

型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value (25/50°C)		25°C时最大额定功耗 Max. Power Rating at 25°C	热时间常数约 Thermal Time Constant Approx.	耗散系数约 Dissipation Constant Approx.	工作温度 Operating Temperature
	阻值范围 Range (kΩ)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	Pmax (mW)	τ (s)	δ (mW/°C)	(°C)
MF57A	0.22 K~10 K	F: ±1 G: ±2 H: ±3	2700~4700	F: ±1 G: ±2	0.3	60	6 ~ 13	-40 ~ +125
MF57B	0.4 K~10 K	J: ±5	3600~4500		0.2	50	3.5	
MF57C	0.4 K~2 K	J: ±5	2400~3000		0.2	60	3.5	

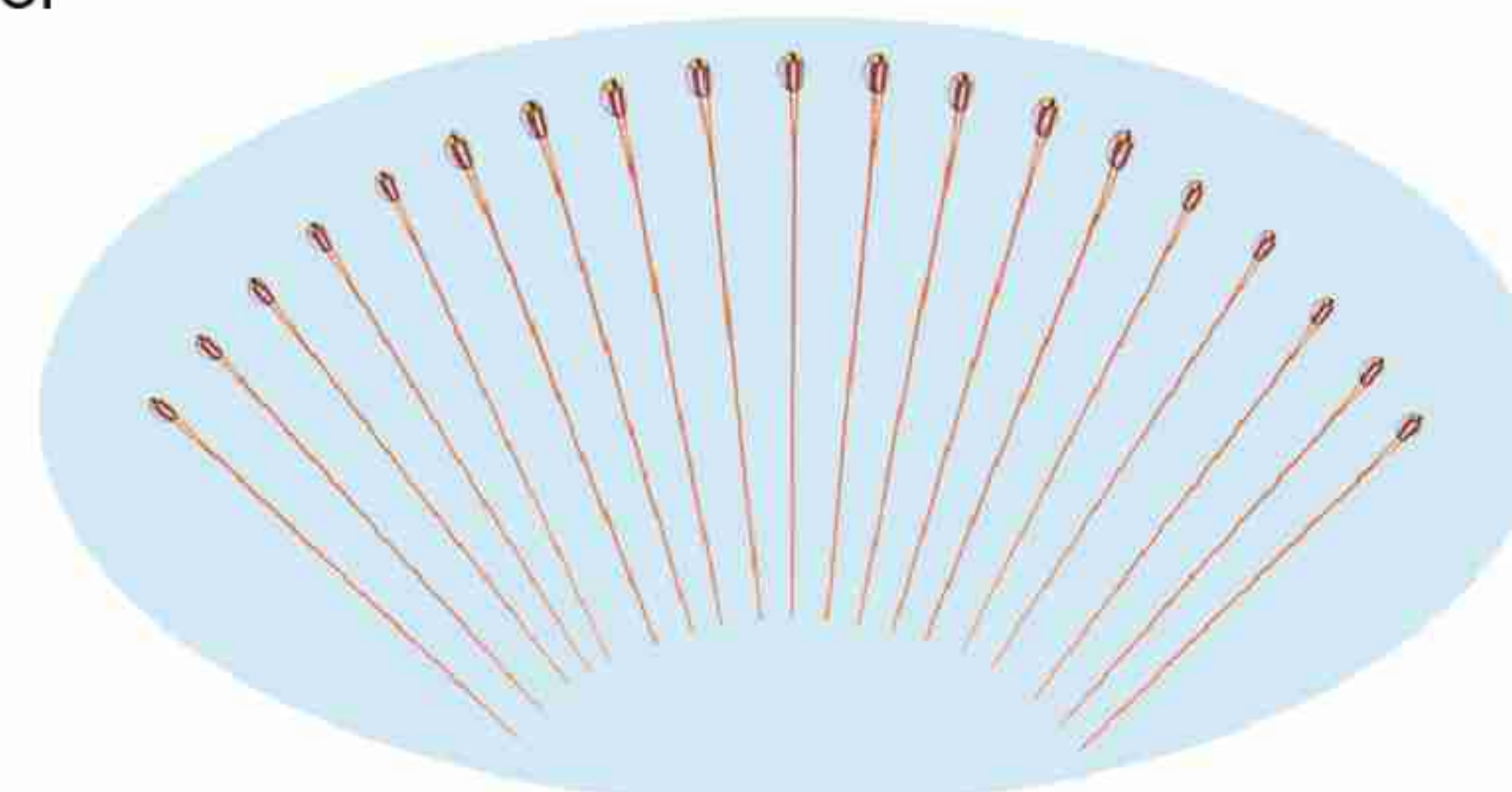
负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF51玻封测温型NTC热敏电阻器系列

MF51 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor

通过AEC-Q200检测
AEC-Q200 Qualified



● 应用范围

- 工业控制
- 家用电器
- 汽车电子
- 医疗电子
- 办公设备
- 试验仪器

● Applications

- Industrial control.
- Household appliances.
- Automotive electronics.
- Medical electronics.
- Office equipment.
- Testing instruments.

● 特点

- 体积小、灵敏度高、测试精度高
- 自动化生产、一致性好、互换性好
- 由于玻璃封装，可在高温高湿等恶劣环境中使用，稳定性好
- 可以采用金电极热敏电阻芯片，可靠性高、寿命长

● 安规认证 Certifications



UL1434认证
UL 1434 Certification
(File# E240991)



CQC 认证
CQC Certification
(File# 19001222003)

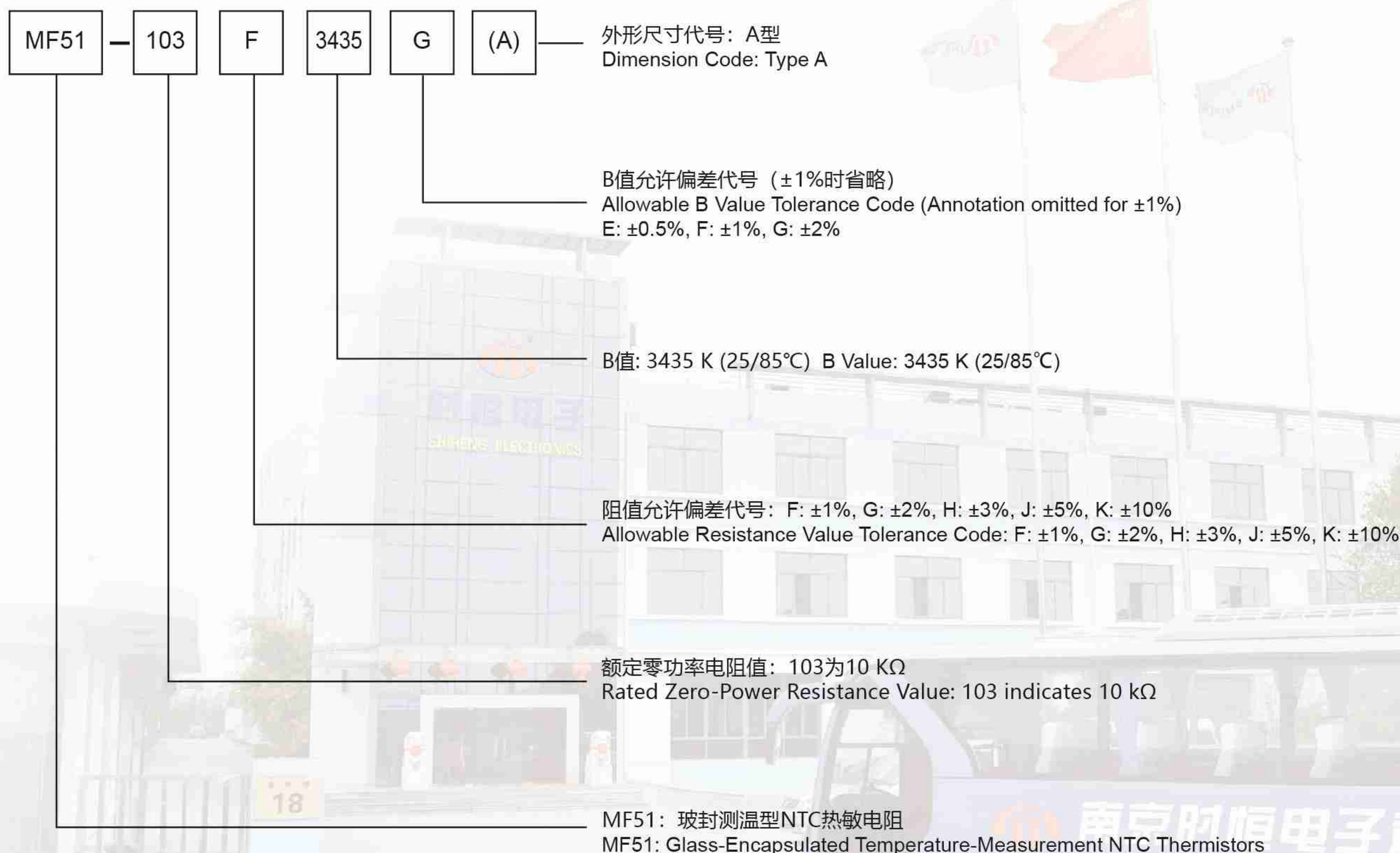


TUV 认证
TUV Certification
(File# R50245892)

● Features

- Small size, high sensitivity, and high testing accuracy.
- Automated production, good consistency, and excellent interchangeability.
- Glass encapsulation allows for use in harsh environments with high temperature and humidity, ensuring good stability.
- Gold electrode thermistor chip can be used, offering high reliability and long lifespan.

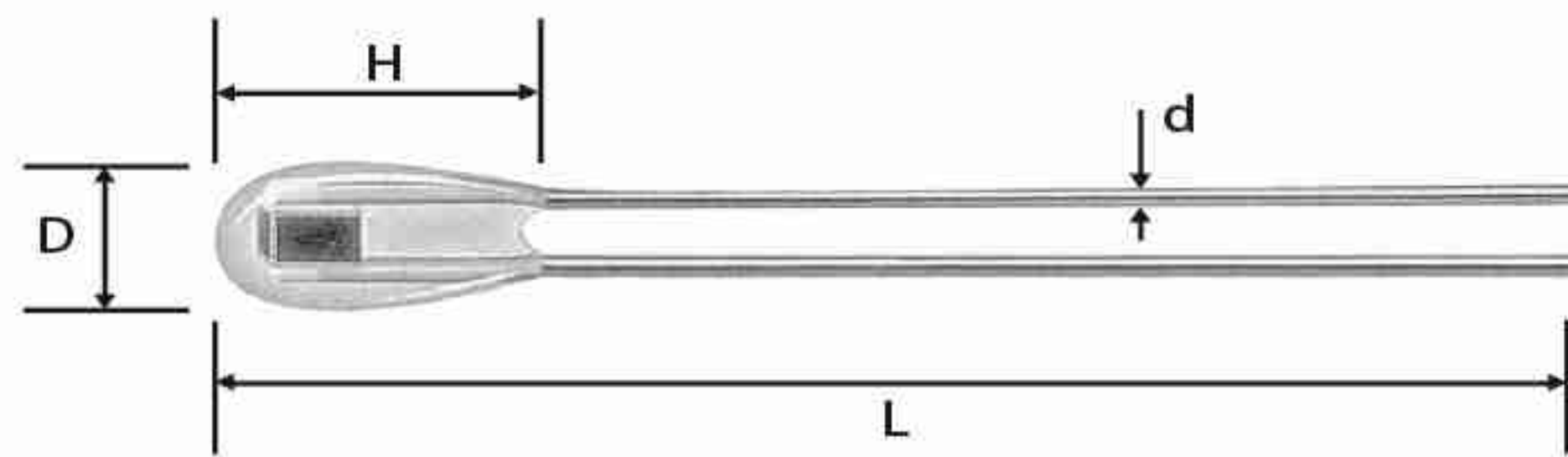
● 产品标志说明 Marking Instruction



MF51玻封测温型NTC热敏电阻器系列

MF51 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor

● 外形结构和尺寸 Dimensions (mm)



型号 Part No.	D	H	L	d	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	25°C时最大额定功耗 Max. Power Rating at 25°C	绝缘电阻 Insulation Resistance	工作温度 Operating Temperature
					δ (mW/°C)	T (s)	Pmax (mW)	(M Ω)	(°C)
MF51 - □□□□ (A)	2.15±0.25	3.6±0.5	65±5	0.3±0.02	1.4	12	50	DC/500 V 50	-55~+250
MF51 - □□□□ (B)	1.7±0.25	3.2±0.5	65±5	0.25±0.02	0.9	9	35	DC/50 V 10	
MF51 - □□□□ (C)	1.3±0.2	2.4±0.5	65±5	0.20±0.02	0.75	5	15	DC/50 V 10	
MF51 - □□□□ (D)	1.0±0.2	2.2±0.5	65±5	0.20±0.02	0.68	3.5	12	DC/50 V 10	
MF51 - □□□□ (F)	0.8±0.2	1.8±0.5	65±5	0.15±0.02	0.4	2	10	DC/50 V 10	

● 主要技术参数 Main Technical Specifications

型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value (25/50°C)	
	阻值范围 Range (k Ω)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)
MF51 - □□3380□ (□)	2 ~ 10	E: ±0.5 F: ±1 G: ±2 H: ±3 J: ±5	3380	E: ±0.5 F: ±1 G: ±2
MF51 - □□3435□ (□)	2 ~ 10		B25/85=3435	
MF51 - □□3450□ (□)	2 ~ 10		3450	
MF51 - □□3750□ (□)	8 ~ 10		3750	
MF51 - □□3950□ (□)	10 ~ 50		3950	
MF51 - □□4150□ (□)	50 ~ 100		4150	
MF51 - □□4250□ (□)	100 ~ 350		4200	
MF51 - □□4350□ (□)	870 ~ 980		4350	
MF51 - □□4450□ (□)	1000 ~ 1500		4450	
MF51 - 2.186K□3420□ (□)	R25=2.186 R0=6		B25/85=3420 (B0/100=3390)	
MF51 - 10.74K□3480□ (□)	R25=10.74 R0=30		B25/85=3480 (B0/100=3450)	
MF51 - 49.12K□3992□ (□)	R25=49.12 R100=3.3		B25/85=3992 (B0/100=3970)	
MF51 - 98.63K□4066□ (□)	R25=98.63 R200=0.55		B25/85=4066 (B100/200=4300)	
MF51 - 231.4K□4240□ (□)	R25=231.4 R200=1		B25/85=4240 (B100/200=4537)	

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF58玻封测温型NTC热敏电阻器系列

MF58 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor

● 应用范围

- ◎ 家用电器(如空调机、微波炉、电磁炉、多士炉、电风扇、电取暖炉等)的温度控制与温度检测
- ◎ 办公自动化设备(如复印机、打印机等)的温度检测或温度补偿
- ◎ 手机电池、电池组
- ◎ 仪表线圈、集成电路、石英晶体振荡器和热电偶的温度补偿

● Applications

- ◎ Temperature control and detection in household appliances such as air conditioners, microwaves, induction cookers, electric stoves, electric fans, electric heaters, etc.
- ◎ Temperature detection and compensation in office automation equipment such as copiers and printers.
- ◎ Mobile phone batteries and battery packs.
- ◎ Temperature compensation for instrumentation coils, integrated circuits, quartz crystal oscillators, and thermocouples.

● 特点

- ◎ 稳定性好、可靠性高
- ◎ 阻值范围宽、精度高
- ◎ 可在高温和高湿等恶劣环境下使用
- ◎ 体积小、重量轻、结构坚固，便于自动化安装
- ◎ 热感应快、灵敏度高。

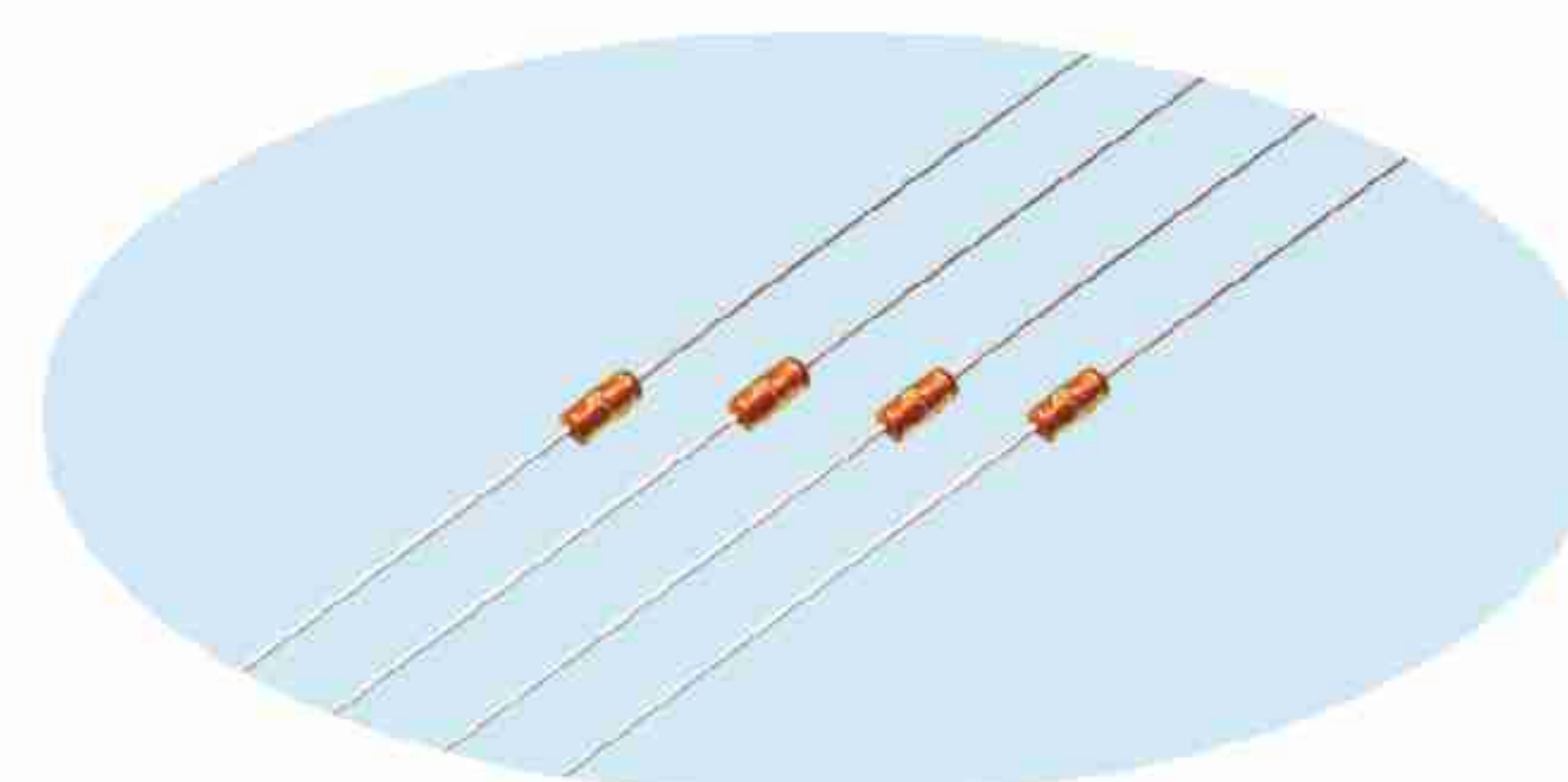
● Features

- ◎ Excellent stability and high reliability.
- ◎ Wide resistance range and high accuracy.
- ◎ Suitable for operation in harsh environments with high temperature and humidity.
- ◎ Compact size, lightweight, and sturdy structure, facilitating automatic installation.
- ◎ Fast thermal response and high sensitivity.

● 产品标志说明 Marking Instruction



通过AEC-Q200检测
AEC-Q200 Qualified



江苏省高新技术产品
High-Tech Product in Jiangsu Province

● 安规认证 Certifications

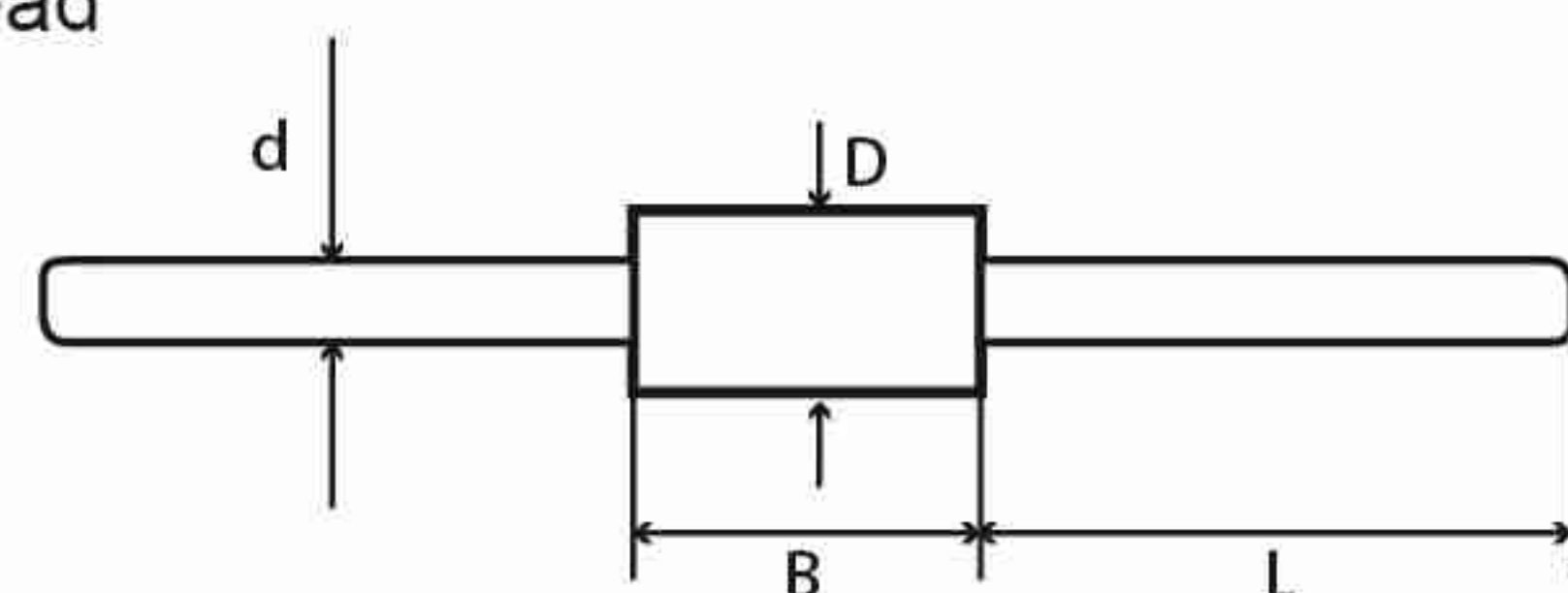


MF58玻封测温型NTC热敏电阻器系列

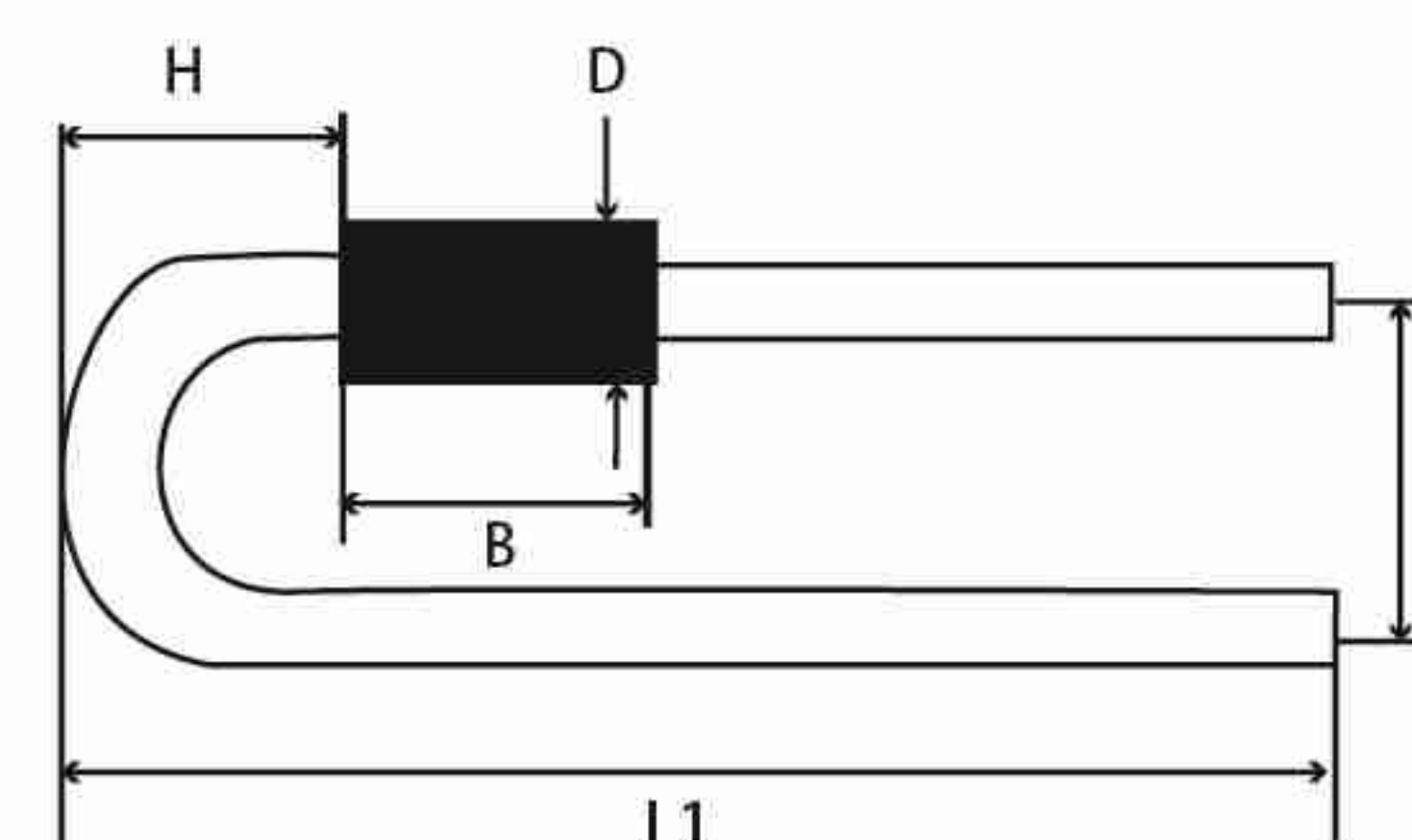
MF58 Series Glass-Encapsulated Temperature-Measurement NTC Thermistor

● 外形结构和尺寸 Dimensions (mm)

直线 Straight Lead



折弯 Bent Lead



品种Type	项目Items	代码Code	引线材质Lead wire	$d \pm 0.05$	$D \pm 0.2$	$B \pm 0.3$	$L \pm 1$	$L1 \pm 1$	$H \pm 0.5$	$P \pm 0.5$
常规玻壳直线 Standard Glass-Encapsulated Straight Lead		B1	CP	0.5	1.8	3.7	28	/	/	/
常规玻壳 折弯产品 Standard Glass-Encapsulated Bent Lead		B1	CP	0.5	1.8	3.7	/	10	1.6	2.5
大玻壳直线 Large Glass-Encapsulated Straight Lead		B2	CP	0.5	2.4	4.2	28	/	/	/

● 主要技术参数 Main Technical Specifications

型号 Part No.	25°C的零功率电阻值 Zero-Power Resistance at 25°C R_{25}		B值 (25/50°C) B Value (25/50°C)		热时间常数约 Thermal Time Constant Approx.	耗散系数约 Dissipation Constant Approx.	25°C时最大额定功耗 Max. Power Rating at 25°C	工作温度 Operating Temperature	绝缘电阻 Insulation Resistance
	阻值范围 Range (k Ω)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	τ (s)	δ (mW/°C)	P_{max} (mW)	(°C)	DC/500V (M Ω)
MF58 - □□□□□ (B1)	0.1-3780	E: ± 0.5 F: ± 1 G: ± 2 H: ± 3 J: ± 5	3100-4500	E: ± 0.5 F: ± 1 G: ± 2	12	1.8	50	-55~+250	500
MF58 - □□□□□ (B2)					20	2			

负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

MF59玻璃封片式NTC热敏电阻器系列

MF59 Series Glass-Encapsulated Chip NTC Thermistor

通过AEC-Q200检测
AEC-Q200 Qualified

● 特点 Features

- 玻璃封装，可在高温和高湿等恶劣环境下使用
- 测温精度高、稳定性好、阻值范围宽
- 体积小、反应速度快、灵敏度高
- 无引线，便于SMT自动化安装

- Glass encapsulation for reliable performance in harsh environments, including high temperatures and humidity.
- High temperature measurement accuracy, excellent stability, and a wide resistance range.
- Compact size, fast response time, and high sensitivity.
- Leadless design for easy Surface Mount Technology (SMT) automated assembly.

● 应用范围 Applications

- 办公自动化设备（如笔记本电脑、复印机、打印机等）
- 数码设备（移动电话、PDA等）
- 可充电电池（锂电池、镍氢电池等）
- 仪表线圈、集成电路、石英晶体振荡器的温度补偿
- Office automation equipment (e.g., laptops, copiers, printers).
- Digital devices (e.g., mobile phones, PDAs).
- Rechargeable batteries (e.g., lithium-ion batteries, nickel-metal hydride batteries).
- Temperature compensation for instrumentation coils, integrated circuits, and quartz crystal oscillators.

● 产品标志说明 Marking Instruction



● 外形结构和尺寸 Dimensions(mm)



● 主要技术参数 Main Technical Specifications

型号 Part No.	L	D	25°C的零功率电阻值 Zero-Power Resistance at 25°C R ₂₅		B值 (25/50°C) B Value (25/50°C)		热时间常数约 Thermal Time Constant Approx.	耗散系数约 Dissipation Constant Approx.	25°C时最大 额定功耗 Max. Power Rating at 25°C	工作温度 Operating Temperature
			阻值范围 Range (kΩ)	允许偏差 Allowable Tolerance (%)	标称值 Nominal Value (K)	允许偏差 Allowable Tolerance (%)	τ (s)	δ (mW/°C)	P _{max} (mW)	(°C)
MF59-□□□□ (A)	3.6±0.2	1.5±0.2	0.1-1000 KΩ	E: ±0.5 F: ±1 G: ±2 H: ±3 J: ±5 K: ±10	3100-4500	E: ±0.5 F: ±1 G: ±2	10	2	50	-55 ~ +250
MF59-□□□□ (B)	1.8±0.2	1.1±0.2					5	1	25	

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

● 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.

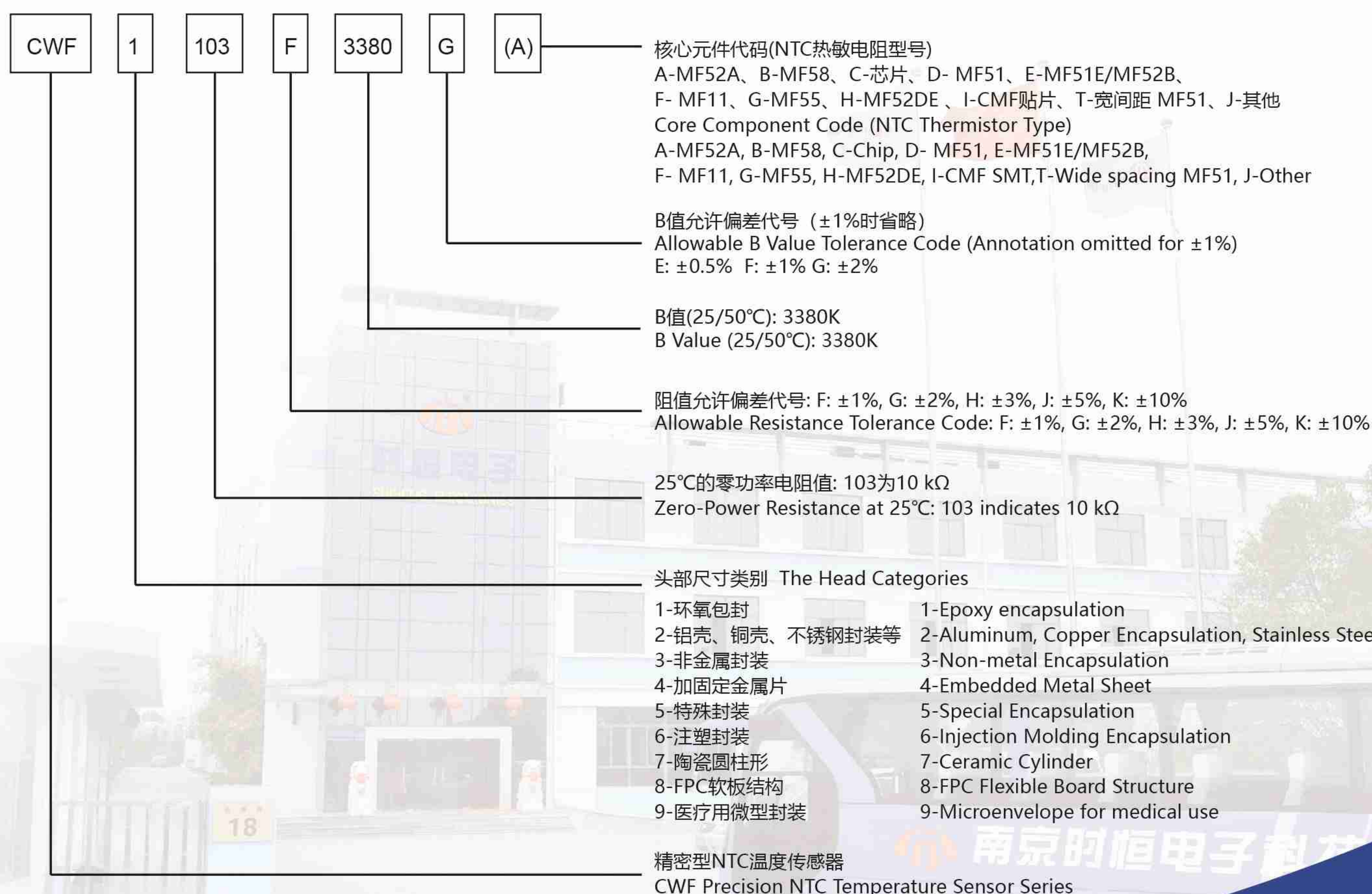
● 特点

- ◎ 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.

● 产品标志说明 Marking Instruction



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



江苏省高新技术产品
High-tech product in Jiangsu Province

● 安规认证 Certifications



UL1434认证
UL1434 Certification
(File# E240991)



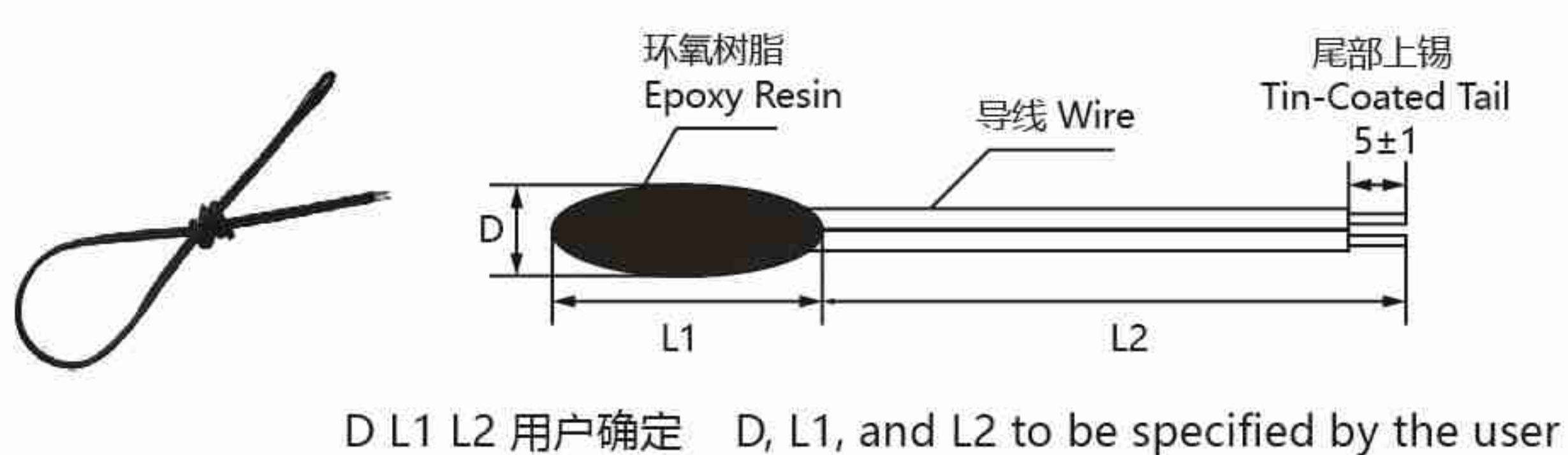
CQC 认证
CQC Certification
(File# 10001052282)

CWF精密型NTC温度传感器系列

CWF Precision NTC Temperature Sensor Series

CWF1 环氧包封

CWF1 Epoxy Encapsulation



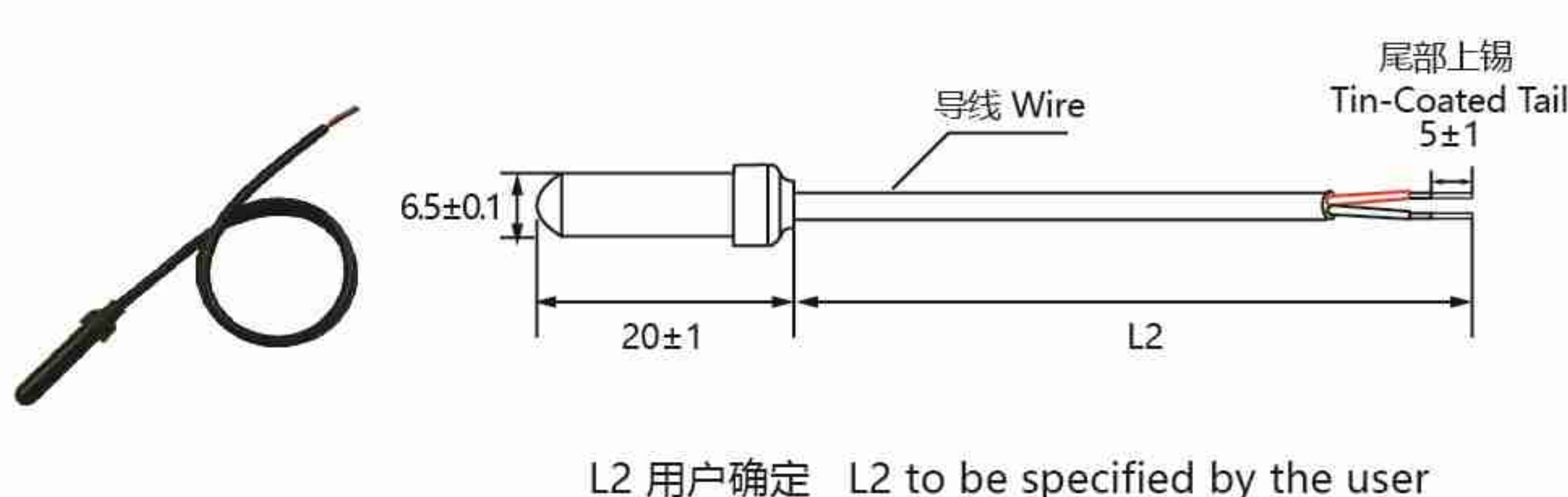
CWF2 铝壳、铜壳、不锈钢壳封装

CWF2 Aluminum, Copper, Stainless Steel Encapsulation



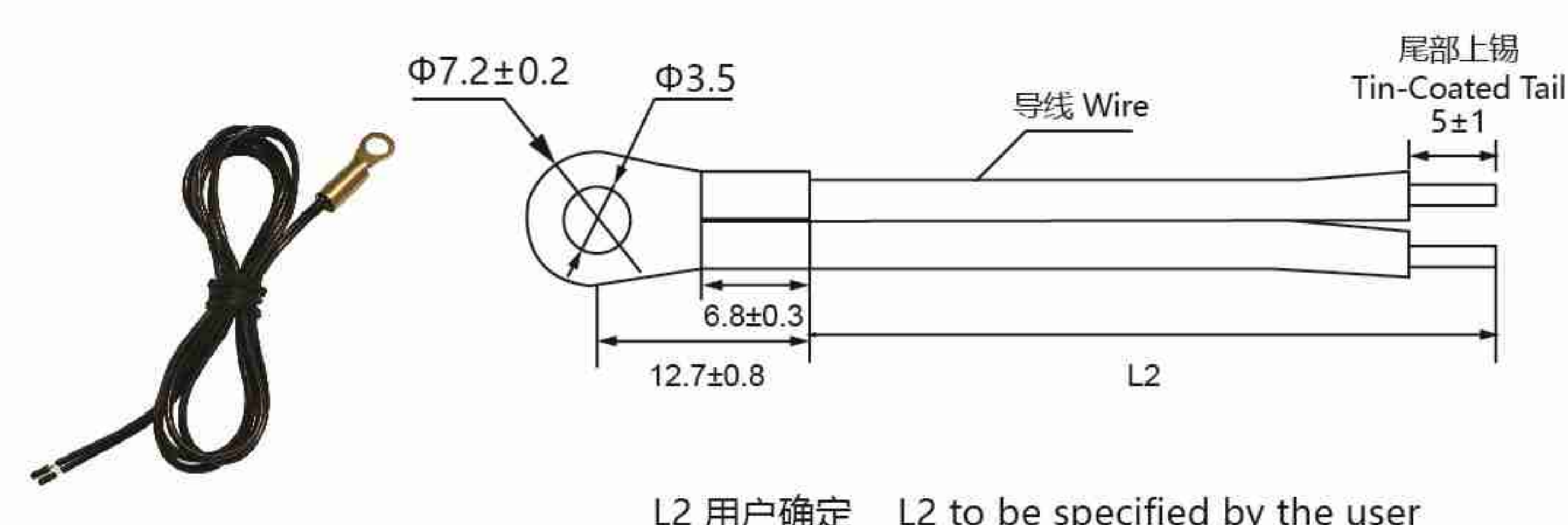
CWF3 非金属封装

CWF3 Non-metal Encapsulation



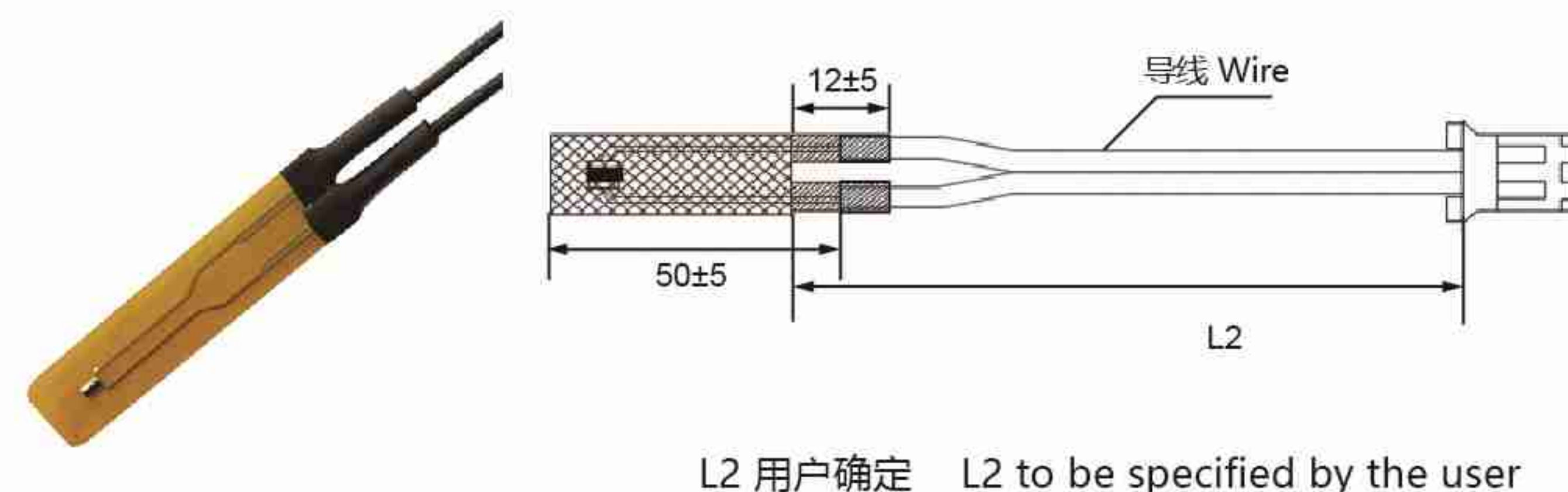
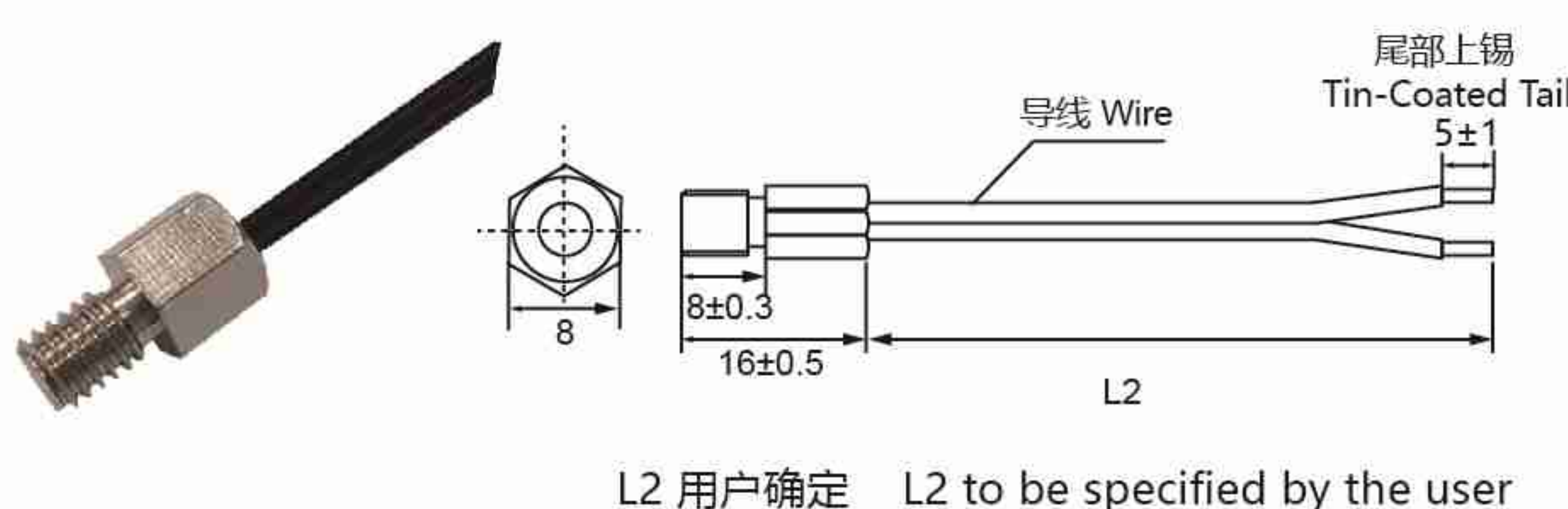
CWF4 加固定金属片

CWF4 Embedded Metal Sheet



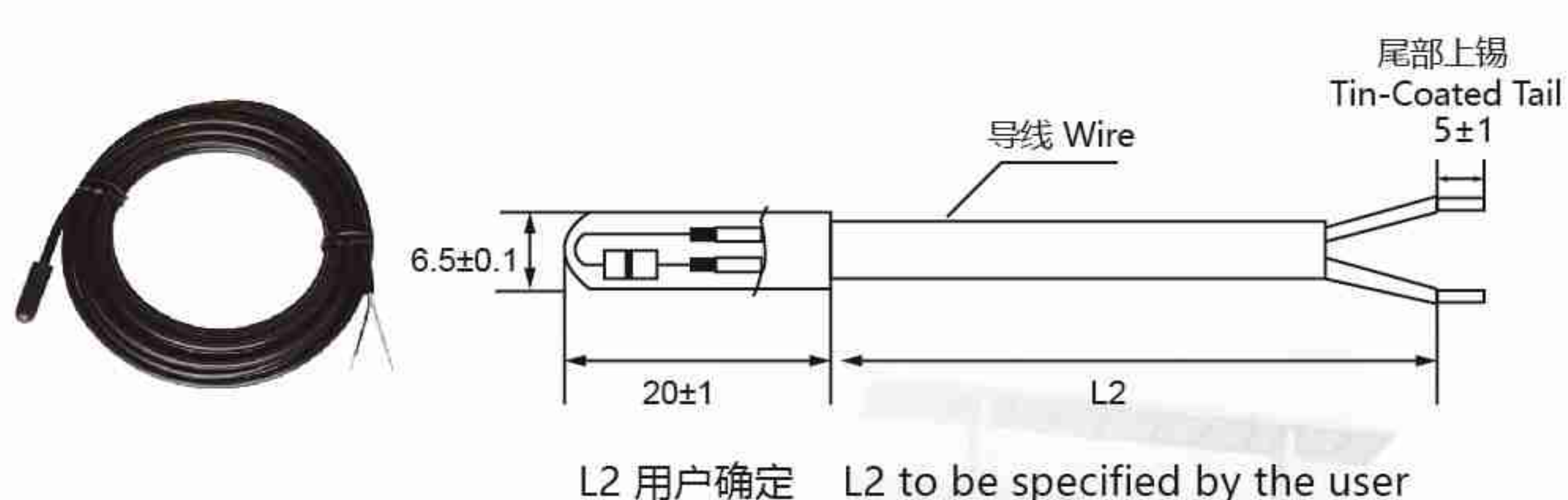
CWF5 加特殊封装

CWF5 Special Encapsulation



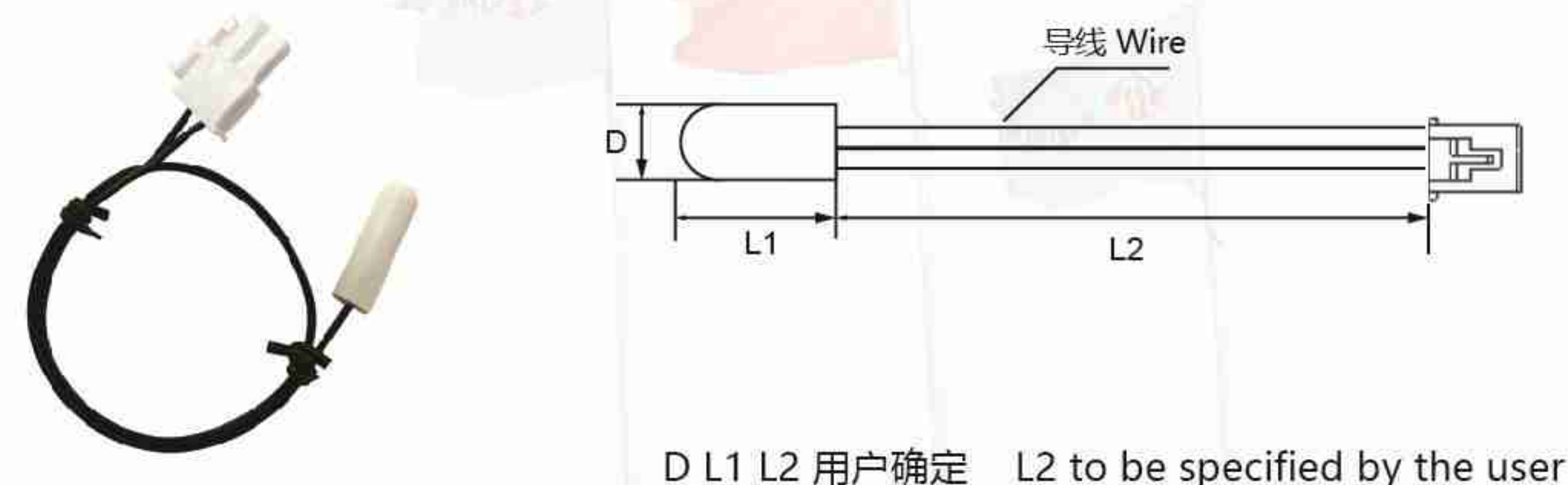
CWF6 注塑封装

CWF6 Injection Molding Encapsulation



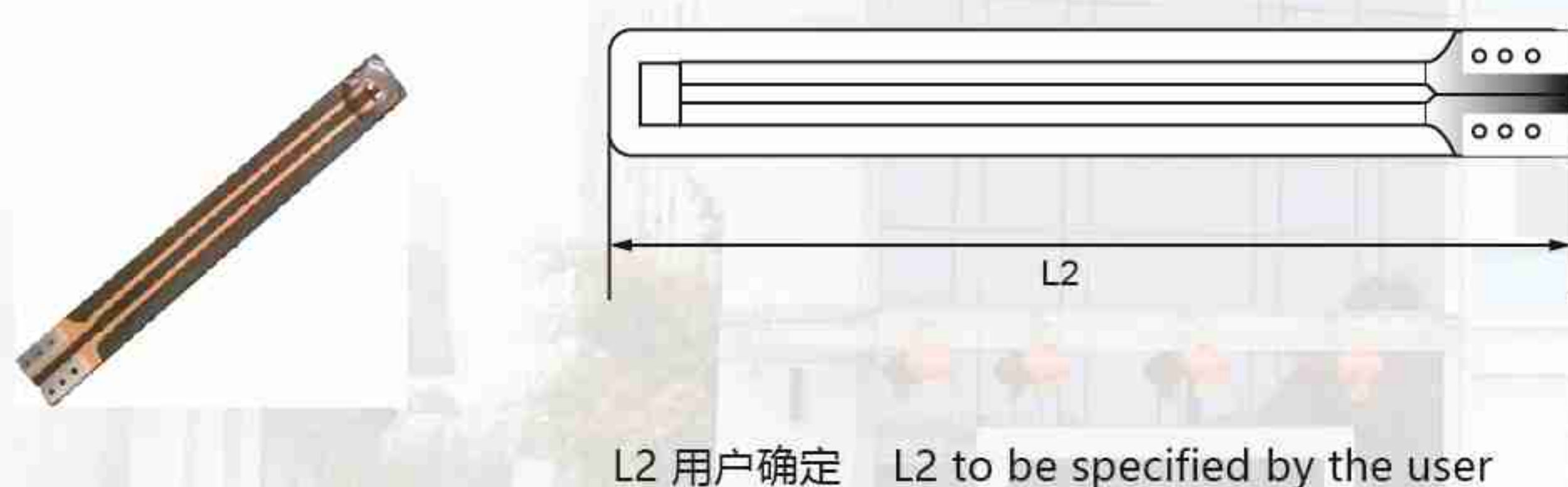
CWF7 陶瓷圆柱形

CWF7 Ceramic Cylinder



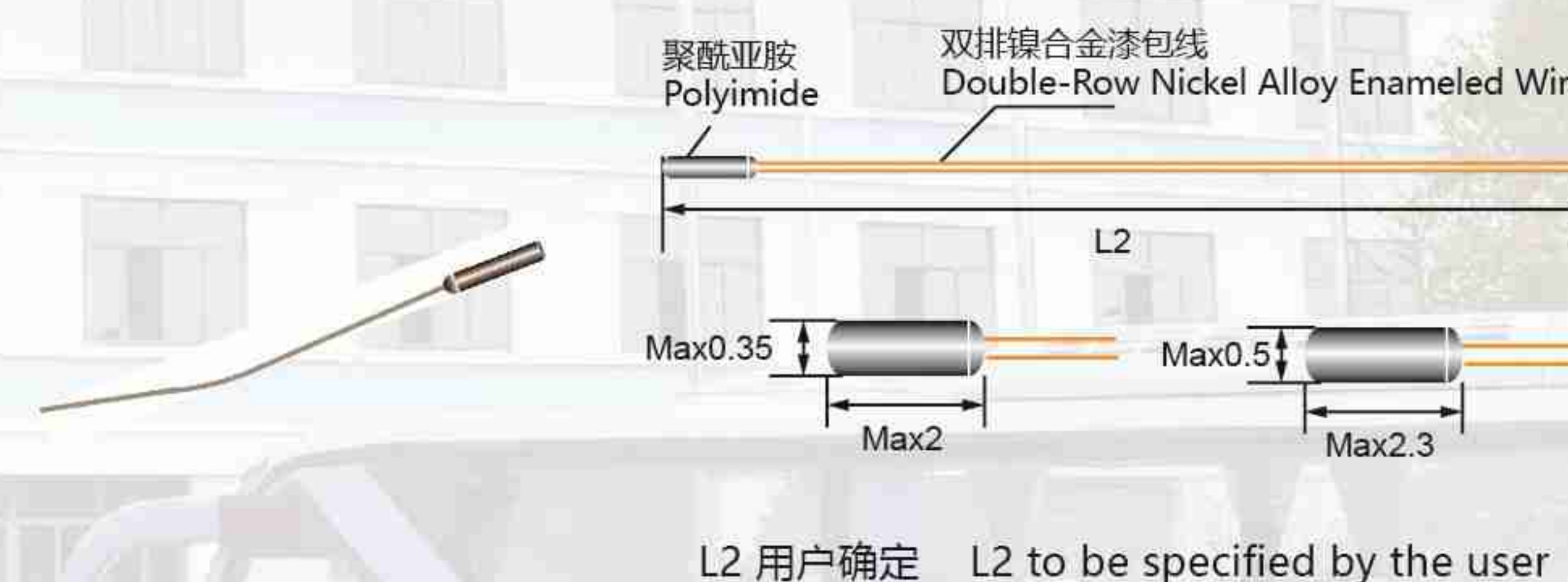
CWF8 FPC软板结构

CWF8 FPC Flexible Board



CWF9 医疗用微型封装

CWF9 Microenvelope for Medical Use



Pt100、Pt1000铂电阻及其温度传感器

Pt100/Pt1000 Platinum Thermistors and their Temperature Sensors

Pt100、Pt1000铂电阻及其温度传感器

Pt100/Pt1000 Platinum RTDs and Temperature Sensors

● 特点 Features

- 采用德国原装进口铂热电阻元件
- 长期稳定性好，宽温度范围内精度很高
- 体积小、耐振动，安装简单
- 与控制仪表相联，能直接显示出被测部分的实际温度

- Built with German-imported platinum resistance elements.
- Excellent long-term stability and high accuracy across a wide temperature range.
- Compact size, vibration resistance, and easy installation.
- Direct interface with control instruments, enabling real-time display of the actual measured temperature.

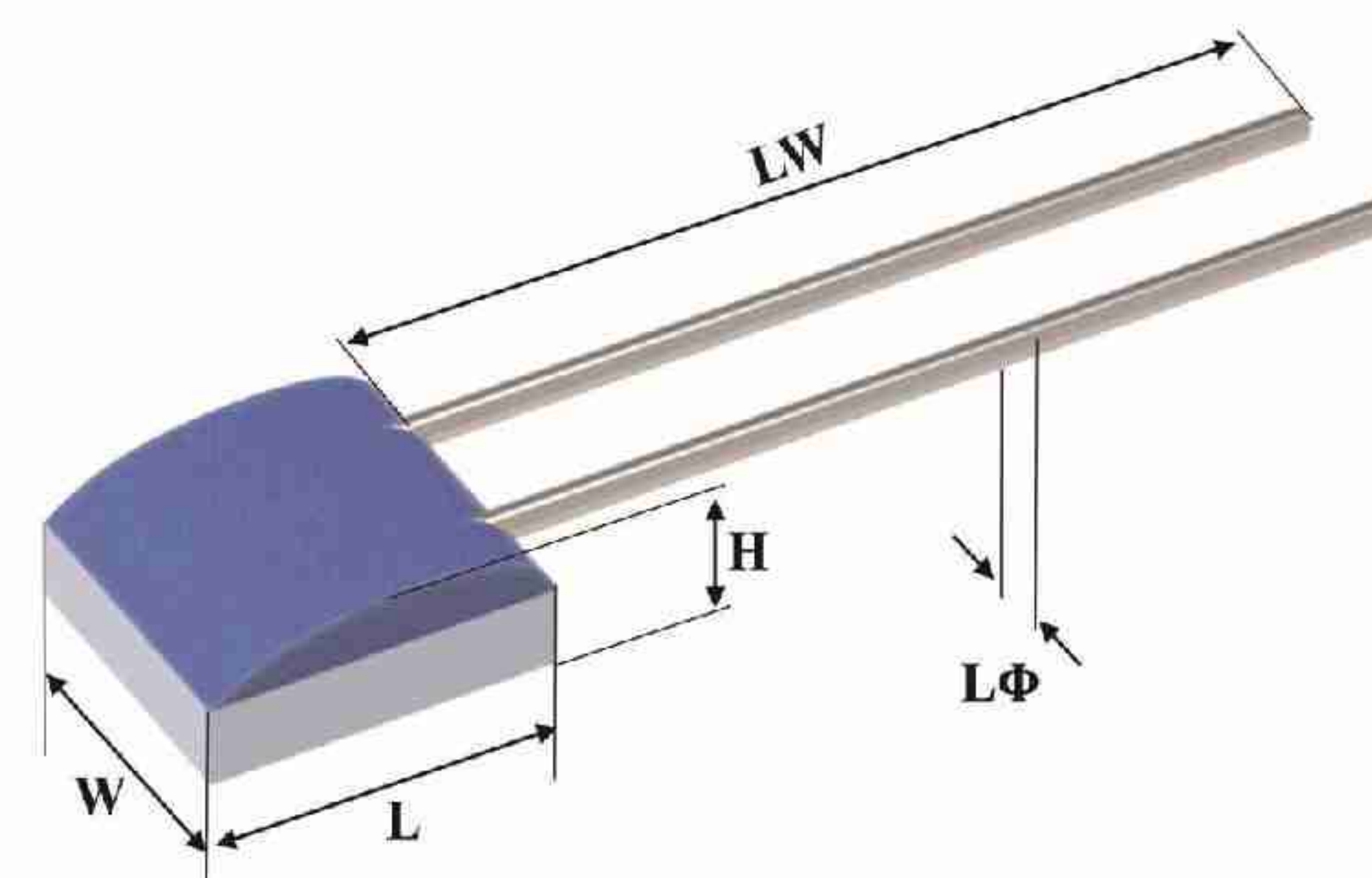
● 应用范围

- 制冷空调系统
- 汽车、铁路机车
- 白色家电、食品加工、纺织设备

● Applications

- Refrigeration and air-conditioning systems.
- Automobiles and railway applications.
- White goods, food processing, and textile equipment.

H=1.1±0.1 mm
L=2.3±0.1 mm
W=2.0±0.1 mm
LW=10±1 mm
LΦ=0.2±0.02 mm



● 铂电阻允差等级 Platinum Resistance Tolerance Grade

允差等级 Tolerance Grade	零度时阻值误差 Resistance Tolerance at 0°C (%)	零度时温度误差 Temperature Tolerance at 0°C (°C)	温度系数α误差 (Ω/Ω/°C) Temperature coefficient α tolerance (Ω/Ω/°C)
AA	±0.04	±(0.10±0.0017 t)	0.003851±0.000004
A	±0.06	±(0.15±0.0020 t)	0.003851±0.000005
B	±0.12	±(0.30±0.0050 t)	0.003851±0.000012
C	±0.24	±(0.60±0.0100 t)	0.003851±0.000024
t =温度绝对值，单位为°C t = Absolute Temperature Value (°C)			

● 产品标志说明 Marking Instruction



举例: Pt100BL3000

(铂温度传感器 / 0°C时电阻值: 100 Ω / 电阻值允差等级: B级 / 线长: 3000 mm)

For example: Pt100BL3000

(Platinum Temperature Sensor / Resistance Value at 0°C: 100 Ω / Tolerance Grade: B / Wires Length: 3000 mm)



负温度系数(NTC)热敏电阻器 Negative Temperature Coefficient (NTC) Thermistor

热敏电阻器蓝膜芯片系列

Blue Film Chip Thermistor Series

NTC热敏电阻蓝膜包装芯片，作为一种独特的NTC芯片包装形式是源于邦定工艺的需要，适应自动化生产。邦定封装方式相对于传统SMT贴片方式，生产效率提高，成本降低，制成品的防腐，抗震及稳定性更好，寿命更长。

NTC Thermistor blue film encapsulated chips, featuring a unique packaging method derived from bonding technology, are designed for automated production. Compared to traditional SMT processes, this method enhances production efficient, reduces costs, and improves corrosion resistance, shock resistance, and stability, resulting in a longer product lifespan.

● 特点

- ◎ 体积小
- ◎ 测温精度高
- ◎ 灵敏度高
- ◎ 反应速度快
- ◎ 稳定性好
- ◎ 便于自动化邦定封装

● Features

- ◎ Compact size.
- ◎ High temperature measurement accuracy.
- ◎ High sensitivity.
- ◎ Fast response time.
- ◎ Excellent stability.
- ◎ Suitable for automated bonding and packaging.

● 应用范围

- ◎ IGBT模块、热电堆
- ◎ 集成模块、信息控制模块
- ◎ 半导体激光器/探测器
- ◎ 热管式反应器控制器

● Applications

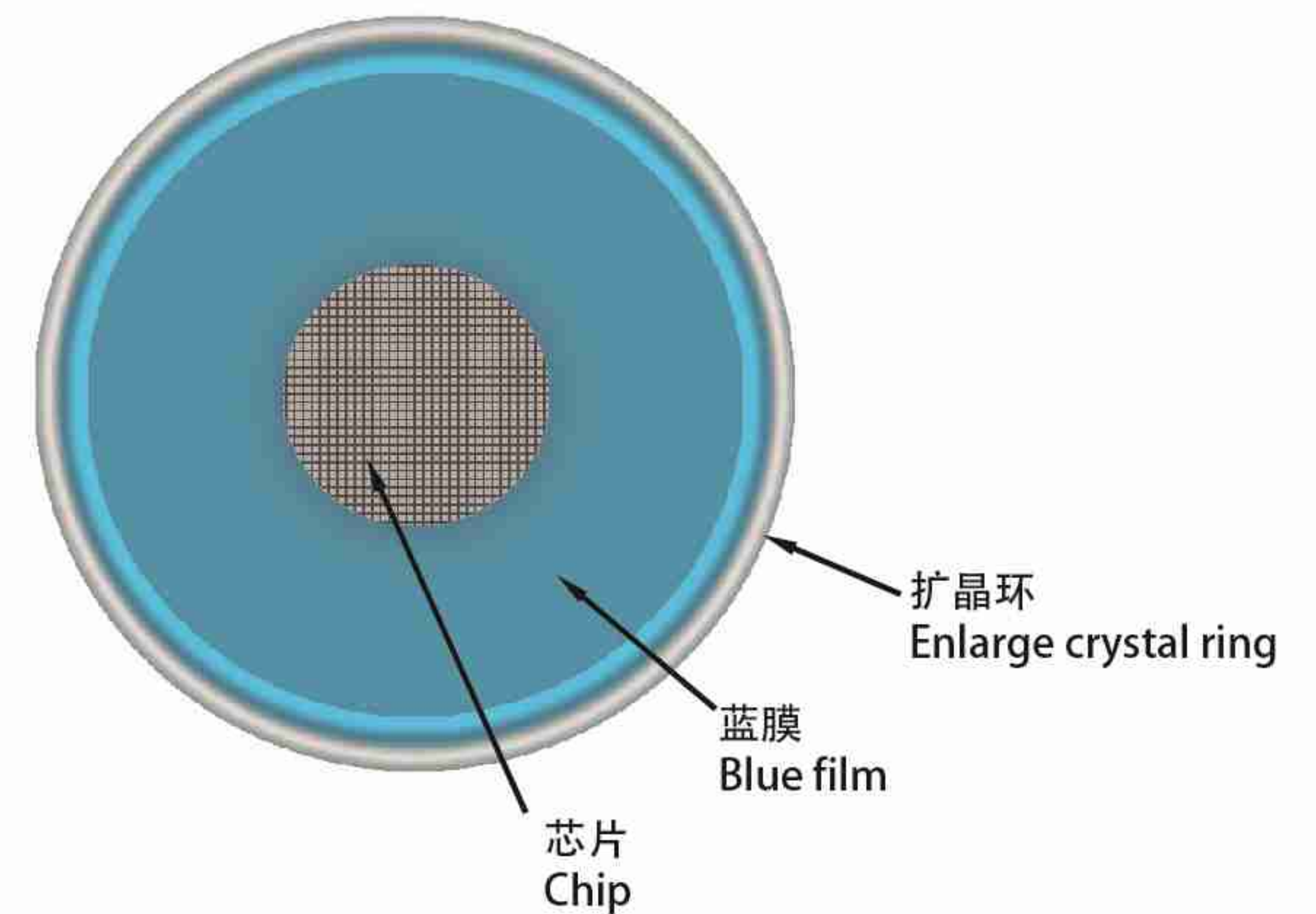
- ◎ IGBT modules, thermoelectric stacks.
- ◎ Integrated modules, information control modules.
- ◎ Semiconductor lasers and detectors.
- ◎ Heat pipe reactor controllers.

● 主要技术参数

- ◎ 芯片外形尺寸 (见下表) ,可根据客户要求定制
- ◎ 额定零功率电阻值 (R_{25}): 2 K ~ 500 k Ω
- ◎ 阻值允许偏差代号: F: $\pm 1\%$ G: $\pm 2\%$ H: $\pm 3\%$ J: $\pm 5\%$ E: $\pm 0.5\%$
- ◎ B值 (25/50 $^{\circ}\text{C}$): 3380 K~4480 K
- ◎ B值允许偏差代号: F: $\pm 1\%$ G: $\pm 2\%$ H: $\pm 3\%$ J: $\pm 5\%$ E: $\pm 0.5\%$ D: $\pm 0.3\%$ C: $\pm 0.2\%$
- ◎ 耗散系数 δ (见下表)
- ◎ 热时间常数 (在静止空气中) τ (见下表)
- ◎ 额定功率 P_w (见下表)
- ◎ 工作温度范围: -40 $^{\circ}\text{C}$ ~ +125 $^{\circ}\text{C}$

● Main Technical Specifications

- ◎ Core chip dimensions (see table below), customizable according to customer requirements.
- ◎ Nominal zero-power resistance (R_{25}): 2 k Ω to 500 k Ω
- ◎ Allowable resistance tolerance code: F: $\pm 1\%$, G: $\pm 2\%$, H: $\pm 3\%$, J: $\pm 5\%$, E: $\pm 0.5\%$
- ◎ B-value (25 $^{\circ}\text{C}/50^{\circ}\text{C}$): 3380 K to 4480 K
- ◎ Allowable B-value tolerance code (marked as needed): F: $\pm 1\%$, G: $\pm 2\%$, H: $\pm 3\%$, J: $\pm 5\%$, E: $\pm 0.5\%$, D: $\pm 0.3\%$, C: $\pm 0.2\%$
- ◎ Dissipation constant δ (see table below)
- ◎ Thermal time constant τ in still air (see table below)
- ◎ Rated power P_w (see table below)
- ◎ Operating temperature range: -40 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$



● 安规认证 Certifications



UL1434认证
UL1434 Certification
(File# E240991)



CQC 认证
CQC Certification
(File# 09001033986)

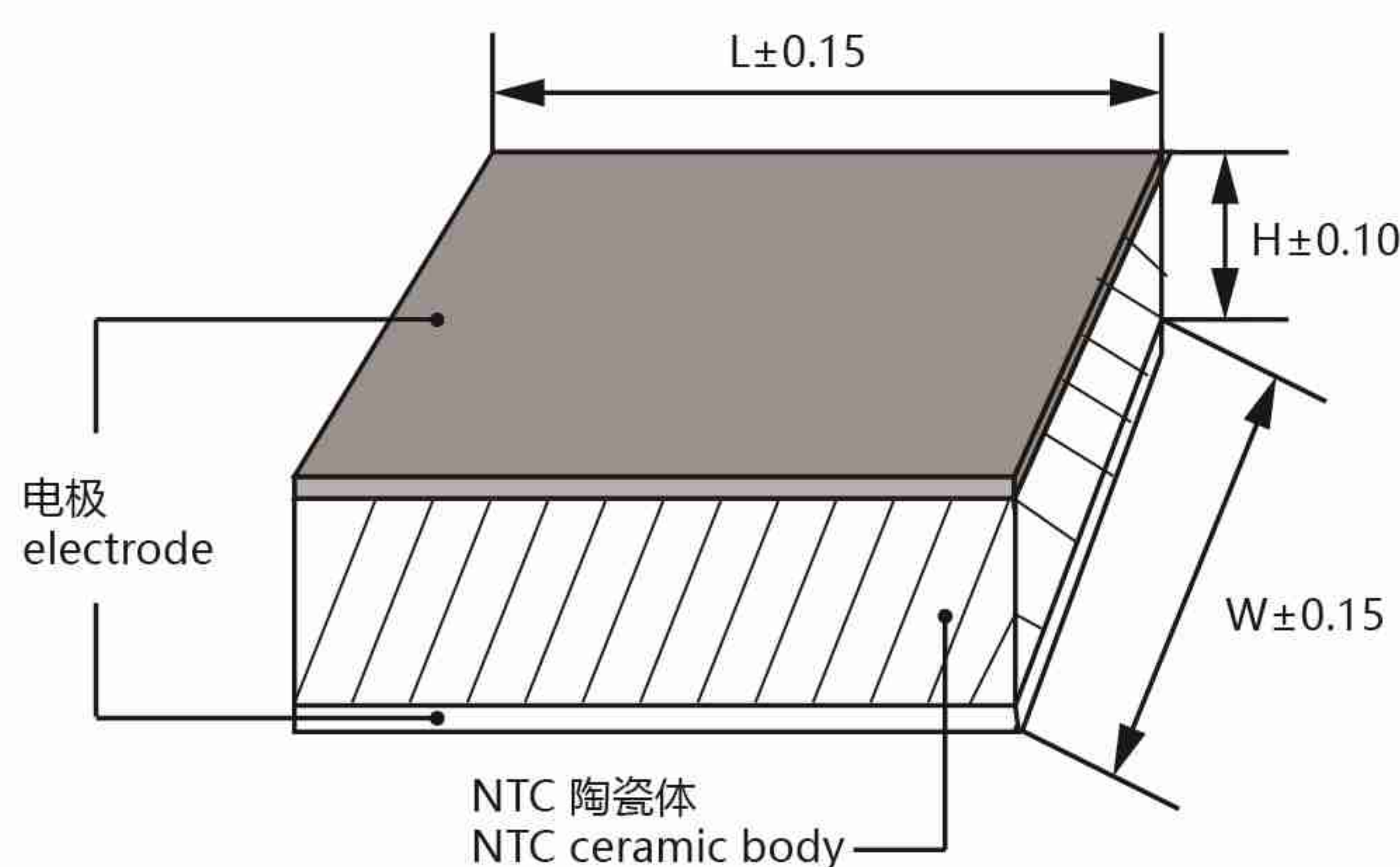
型号 Part No.	长度 Length (mm) L	宽度 Width (mm) W	高度 Height (mm)	耗散系数约 Dissipation Constant Approx.	热时间常数约 Thermal Time Constant Approx.	25 $^{\circ}\text{C}$ 时最大 额定功耗 Max. Power Rating at 25 $^{\circ}\text{C}$
				δ (mW/ $^{\circ}\text{C}$)	τ (s)	P_{max} (mW)
MF52C	0.8	0.8	0.5	0.6	3.4	100
MF52C	0.64	0.64	0.45	0.4	2	80
MF58C	0.5	0.5	0.3	0.2	1	50
MF58C	0.32	0.32	0.23	0.1	0.35	20

热时间常数是在50 $^{\circ}\text{C}$ →25 $^{\circ}\text{C}$ ，油中测试
Thermal time constant measured in oil, from 50 $^{\circ}\text{C}$ to 25 $^{\circ}\text{C}$.

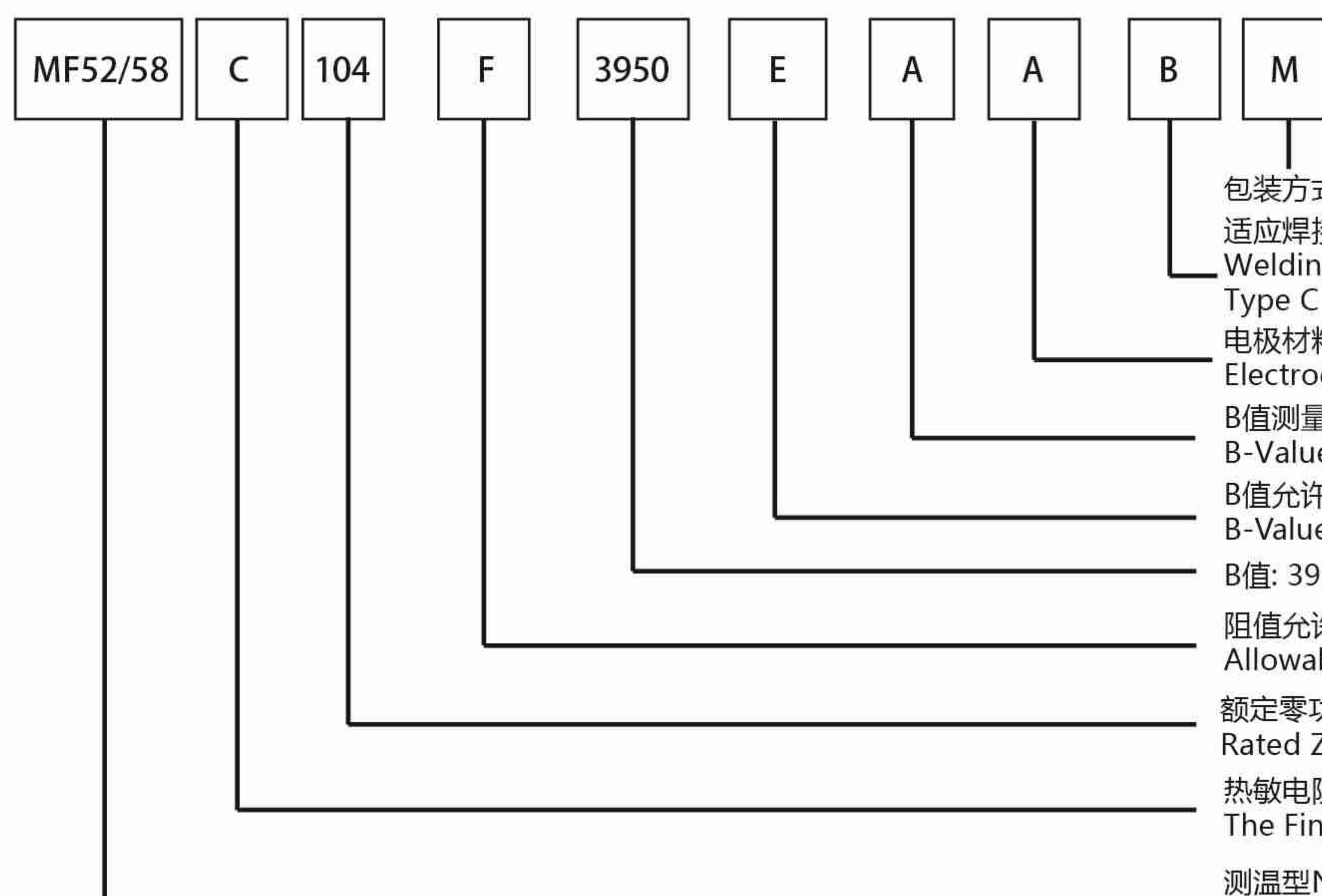
热敏电阻器蓝膜芯片系列

Blue Film Chip Thermistor Series

● 外形结构和尺寸 Dimensions (mm)



● 产品标志说明 Marking Instruction



包装方式: 蓝膜 Packing Method: Blue Film
 适应焊接方式: A型为锡焊接, B型为邦定焊接, C型为银焊接, D为粘接焊接
 Welding Method: Type A is soldering, Type B is wire bonding, Type C is silver soldering, Type D is adhesive bonding
 电极材料: A为银电极, B为合金银电极, G为金电极
 Electrode Material: A=silver, B=Alloyed silver electrode, G=gold
 B值测量温度: A为25/50°C, B为25/85°C, C为25/100°C
 B-Value Measured Temperature: A is 25/50°C, B is 25/85°C, C is 25/100°C
 B值允许偏差代码: E: ±0.5% F: ±1% G: ±2% H: ±3% J: ±5% ;
 B-Value Tolerance Code: E: ±0.5%, F: ±1%, G: ±2%, H: ±3%, J: ±5%
 B值: 3950 K B Value: 3950 K
 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: 104为100 kΩ
 Rated Zero-Power Resistance Value: 104 indicates 100 kΩ
 热敏电阻成品为芯片
 The Finished Thermistor is Chip-Type
 测温型NTC热敏电阻器系列
 Blue Film Chip Thermistor Series

● 认证与检测

- ◎ 质量管理体系认证 ISO9001: 2015
IATF16949: 2016
- ◎ 环境管理体系认证 ISO14001: 2015
- ◎ 知识产权管理体系认证: GB/T29490-2013
- ◎ 两化融合管理体系认证:
AITTRE-00920111MS0088301
- ◎ 芯片产品通过CQC认证: CQC09001033986
- ◎ 芯片产品通过安规认证UL、C-UL认证: E240991
- ◎ 芯片产品通过UL标准中10万次耐久性测试
- ◎ 芯片产品通过AEC-Q200试验: 20172052558G
- ◎ 环保检测报告RoHS

● Certifications and Tests Passed

- ◎ Quality management system certification : ISO9001: 2015
IATF16949: 2016
- ◎ Environmental management system certification ISO14001: 2015
- ◎ Intellectual property management system certification: GB/T29490-2013
- ◎ Integration of informatization and industrialization management system certification:
(AITTRE-00920111MS0088301)
- ◎ CQC certification (CQC09001033986)
- ◎ UL/CUL certification (E240991)
- ◎ Passed 100,000-cycle durability test under UL standards
- ◎ Passed AEC-Q200 testing (Report No.20172052558G)
- ◎ Passed RoHS environmental testing

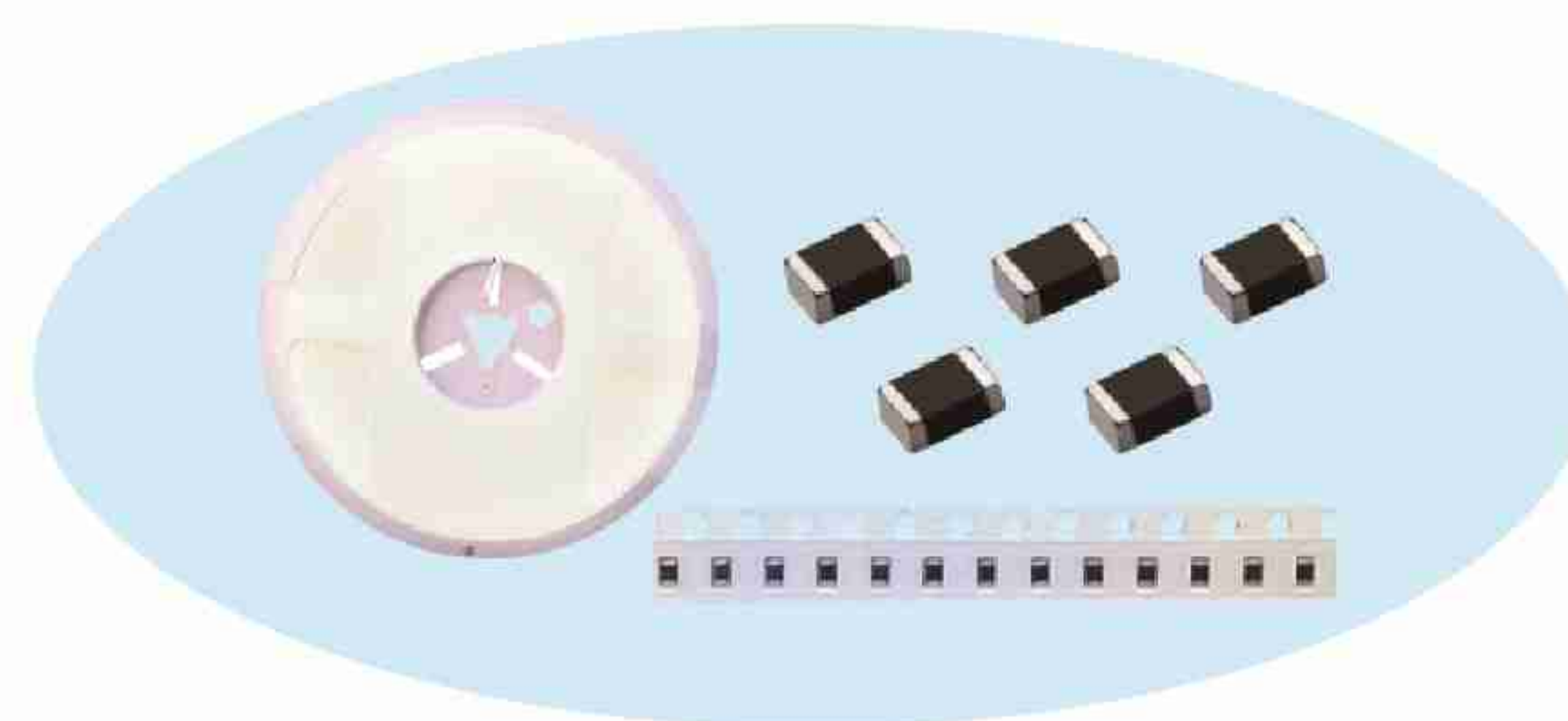
负温度系数(NTC)热敏电阻器

Negative Temperature Coefficient (NTC) Thermistor

CMF片式NTC热敏电阻器

CMF Chip NTC Thermistor Series

通过AEC-Q200检测
AEC-Q200 Qualified



● 特点

- ◎ 体积小
- ◎ 无引线，适合高密度表面贴装
- ◎ 优良的可焊性及耐热冲击性
- ◎ 适合波峰焊及再流焊

● Features

- ◎ Compact size.
- ◎ Leadless design, ideal for high-density surface mounting.
- ◎ Excellent solderability and heat shock resistance.
- ◎ Suitable for wave soldering and reflow soldering.

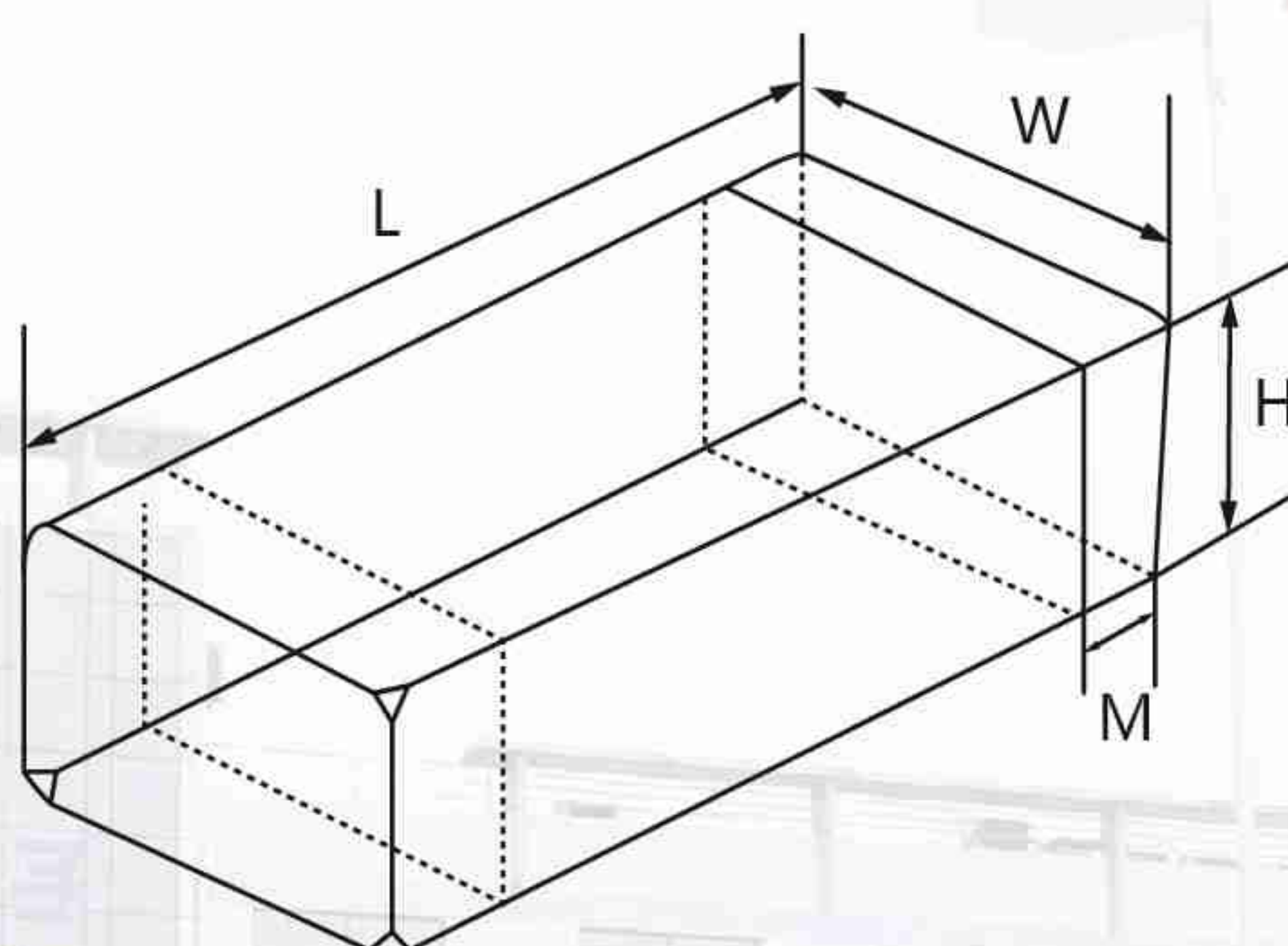
● 用途

- ◎ 半导体集成电路、液晶显示、晶体管、石英振荡器等的温度补偿
- ◎ 可充电电池的温度探测
- ◎ 计算机微处理器的温度探测
- ◎ 需温度补偿的各种电路

● Applications

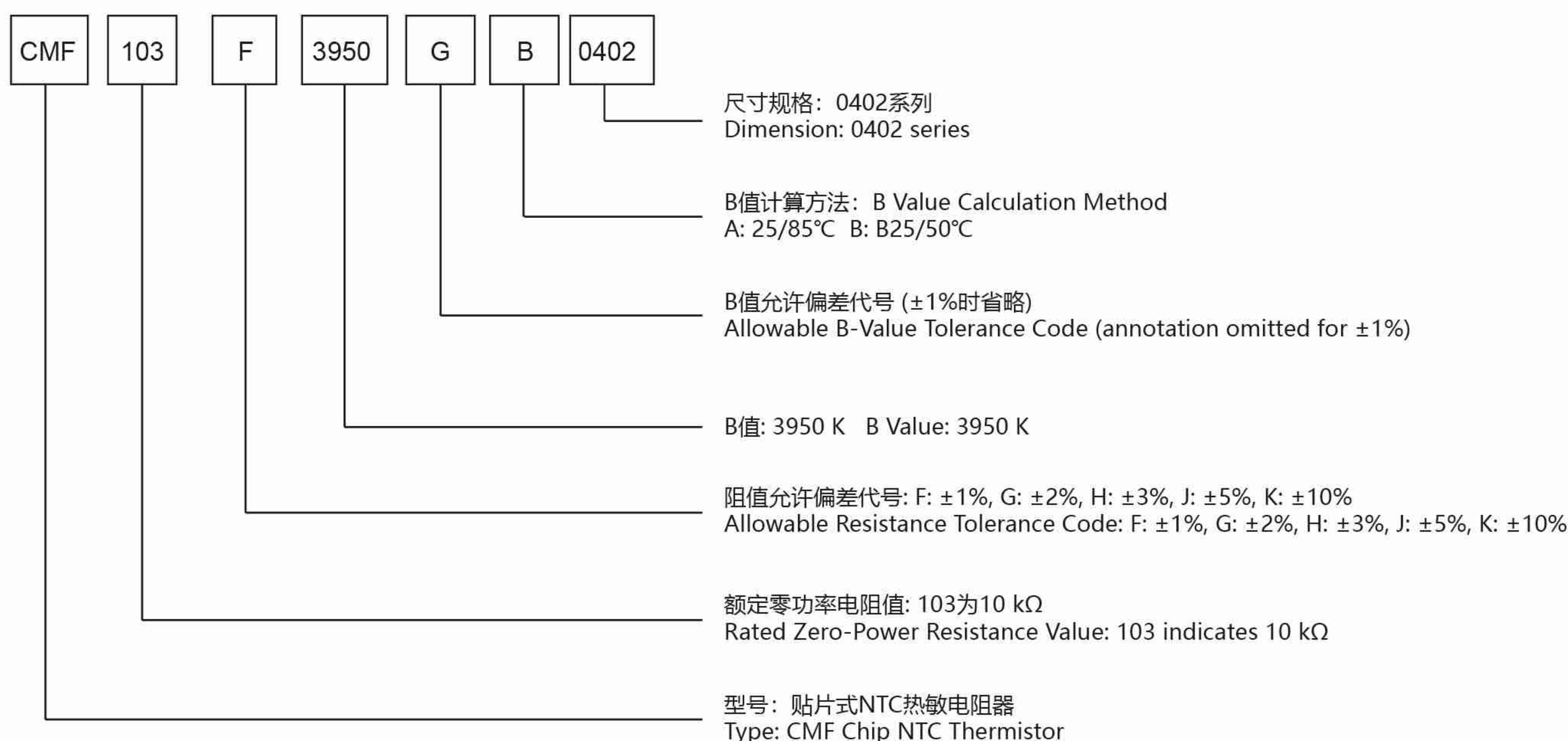
- ◎ Temperature compensation for semiconductor integrated circuits, LCD displays, transistors, and quartz oscillators.
- ◎ Temperature detection for rechargeable batteries.
- ◎ Temperature detection for computer microprocessors (CPU).
- ◎ Various circuits requiring temperature compensation.

● 外形结构和尺寸 Dimensions (mm)



型号 Part No.	长度 Length L	宽度 Width W	高度 Height H	端头宽 Terminal Width M
0402 (inch) (1005) (mm)	0.039±0.006 (1.0±0.15)	0.020±0.006 (0.5±0.15)	0.020±0.006 (0.50±0.15)	0.010±0.004 (0.25±0.10)
0603 (inch) (1608) (mm)	0.063±0.006 (1.6±0.15)	0.031±0.006 (0.8±0.15)	0.031±0.006 (0.80±0.15)	0.012±0.008 (0.30±0.20)
0805 (inch) (2012) (mm)	0.079±0.008 (2.0±0.20)	0.049±0.008 (1.25±0.20)	0.033±0.008 (0.85±0.20)	0.020±0.012 (0.50±0.30)
1206 (inch) (3216) (mm)	0.126±0.008 (3.20±0.20)	0.063±0.008 (1.60±0.20)	0.033±0.008 (0.85±0.20)	0.020±0.012 (0.50±0.30)

● 产品标志说明 Marking Instruction



● 产品系列 Product series

0402系列 0402 Series

型号 Part No.	标称阻值R25 Nominal Resistance Value R25 (k Ω)	B值 B Value (K)
CMF 103F3950□	10	3950
CMF 473F4050□	47	4050
CMF 104F4050□	100	4050

0603系列 0603 Series

型号 Part No.	标称阻值R25 Nominal Resistance Value R25 (k Ω)	B值 B Value (K)
CMF 103F3450□	10	3450
CMF 103F3970□	10	3970
CMF 223F3900□	22	3900
CMF 473F3950□	47	3950
CMF 104F3950□	100	3950
CMF 224F3950□	220	3950
CMF 103F3550□	10	3550
CMF 683F3950□	68	3950
CMF 564F4100□	560	4100

0805系列 0805 Series

型号 Part No.	标称阻值R25 Nominal Resistance Value R25 (k Ω)	B值 B Value (K)
CMF 472F3435□	4.7	3435
CMF 103F3435□	10	3435
CMF 103F3550□	10	3550
CMF 223F3900□	22	3900
CMF 473F4000□	47	4000
CMF 104F4000□	100	4000
CMF 103F3970□	10	3970
CMF 202F3200□	2	3200
CMF 153F3650□	15	3650
CMF 333F4050□	33	4050

1206系列 1206 Series

型号 Part No.	标称阻值R25 Nominal Resistance Value R25 (k Ω)	B值 B Value (K)
CMF 221F3200□	0.22	3200
CMF 331F3200□	0.33	3200
CMF 471F3250□	0.47	3250
CMF 681F3250□	0.68	3250
CMF 102F3350□	1.0	3350
CMF 222F3400□	2.2	3400
CMF 332F3400□	3.3	3400
CMF 472F3400□	4.7	3400
CMF 682F3400□	6.8	3400
CMF 103F3500□	10	3500
CMF 103F3900□	10	3900
CMF 153F3900□	15	3900
CMF 223F3950□	22	3950
CMF 333F4000□	33	4000
CMF 473F4100□	47	4100
CMF 683F4100□	68	4100
CMF 104F4200□	100	4200
CMF 224F4300□	220	4300

PPTC高分子正温系数热敏电阻器

Polymer Positive Temperature Coefficient Thermistor

PPTC高分子正温系数热敏电阻器

PPTC (Polymeric Positive Temperature Coefficient) Thermistor Series

● 特点 Features

- ◎ 电阻阻值小、体积小
- ◎ 工作电流范围宽
- ◎ 过电流过温度保护迅速
- ◎ 故障排除后可自动恢复初始状态

- ◎ Low resistance and compact size.
- ◎ Wide operating current range.
- ◎ Fast response to overcurrent and overtemperature events.
- ◎ Automatic reset to initial state after fault clearance.

● 应用范围 Applications

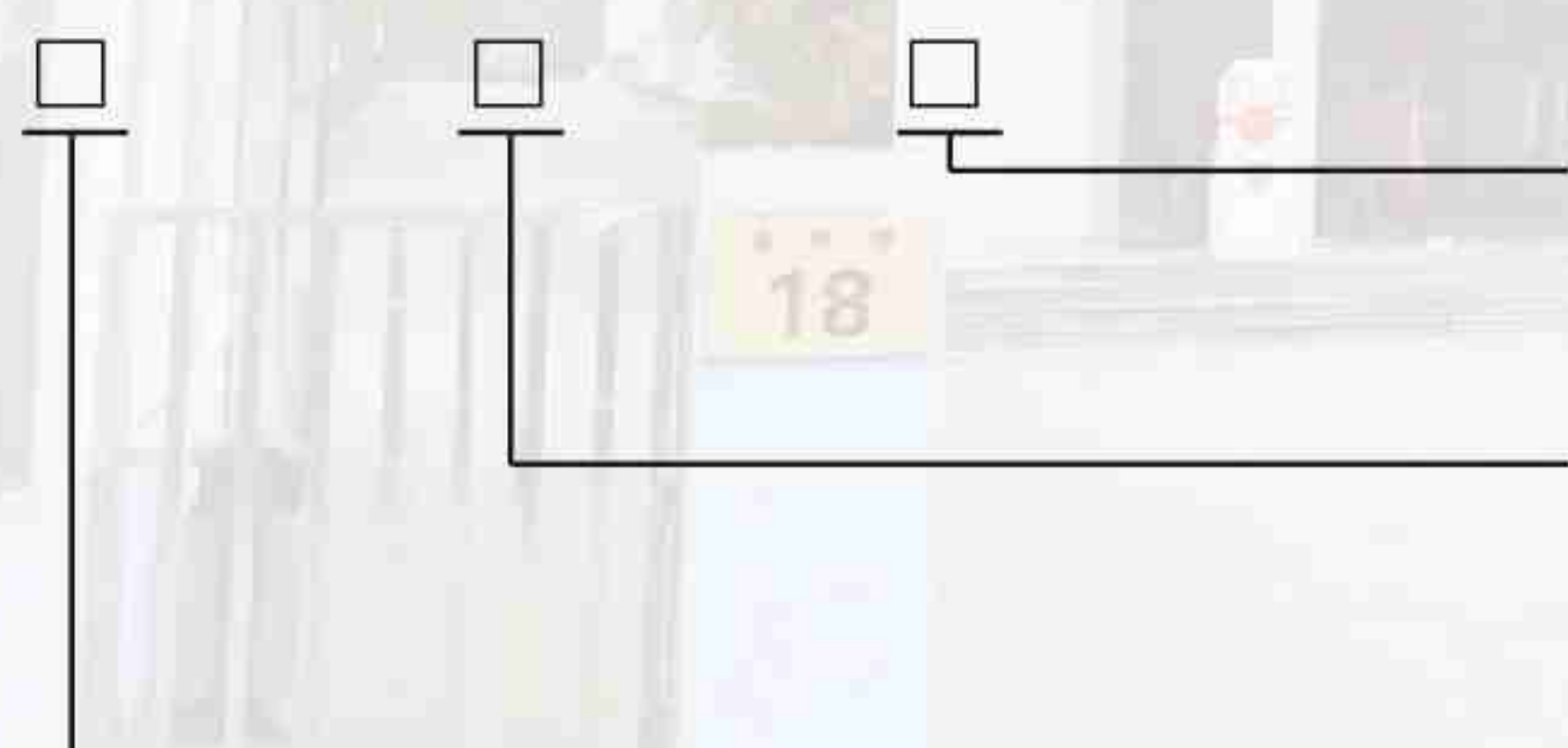
- ◎ 计算机及其外部设备、移动电话
- ◎ 电池组、远程通讯和网络装备、变压器
- ◎ 工业控制设备、汽车及其电子产品
- ◎ Computers, peripheral devices, and mobile phones.
- ◎ Battery packs, remote communication devices, and network equipment transformers.
- ◎ Industrial control equipment, automotive electronics, and other electronic devices.

● 性能指标 Performance Indicators

不动作电流 (IH)	不动作电流即额定电流或保持电流，指在规定的的时间和温度条件下不导致PPTC热敏电阻值超出规定范围的电流
动作电流	使PPTC热敏电阻器阻值呈阶跃型增加时的电流
触发电流 (TC)	最小动作电流
动作时间 (Trip)	动作电流通过PPTC时，电流由初始值降到下限值所经历的时间
动作特性	PPTC动作电流与动作时间之间的关系
耐电压能力 (Vmax)	PPTC承受规定的最大工频电压的能力
耐电流能力 (Imax)	PPTC承受规定的最大工频电流或冲击电流的能力
动作功率 (P)	PPTC在其动作状态时所消耗的最大功率
最小电阻 (Rmin)	25°C时电阻的最小值
最大电阻 (Rmax)	25°C时电阻的最大值

Standby Current (IH)	Current that, under specified time and temperature conditions, does not cause the PPTC resistance to exceed the specified range.
Actuation Current	Current that causes a sharp increase in PPTC resistance.
Trip Current (TQ)	Minimum current that triggers PPTC transition to high-resistance state.
Trip Time (Trip)	Time for the current to drop from initial to minimum value after actuation.
Actuation Characteristics	Relationship between actuation current and actuation time.
Voltage Withstand Capability (Vmax)	Maximum operating voltage the PPTC can withstand.
Current Withstand Capability (Imax)	Maximum surge or operating current the PPTC can withstand.
Actuation Power (P)	Maximum power consumption in the actuated state.
Minimum Resistance (Rmin)	Minimum resistance value measured at 25°C.
Maximum Resistance (Rmax)	Maximum resistance value measured at 25°C.

● 产品标志说明 Marking Instruction

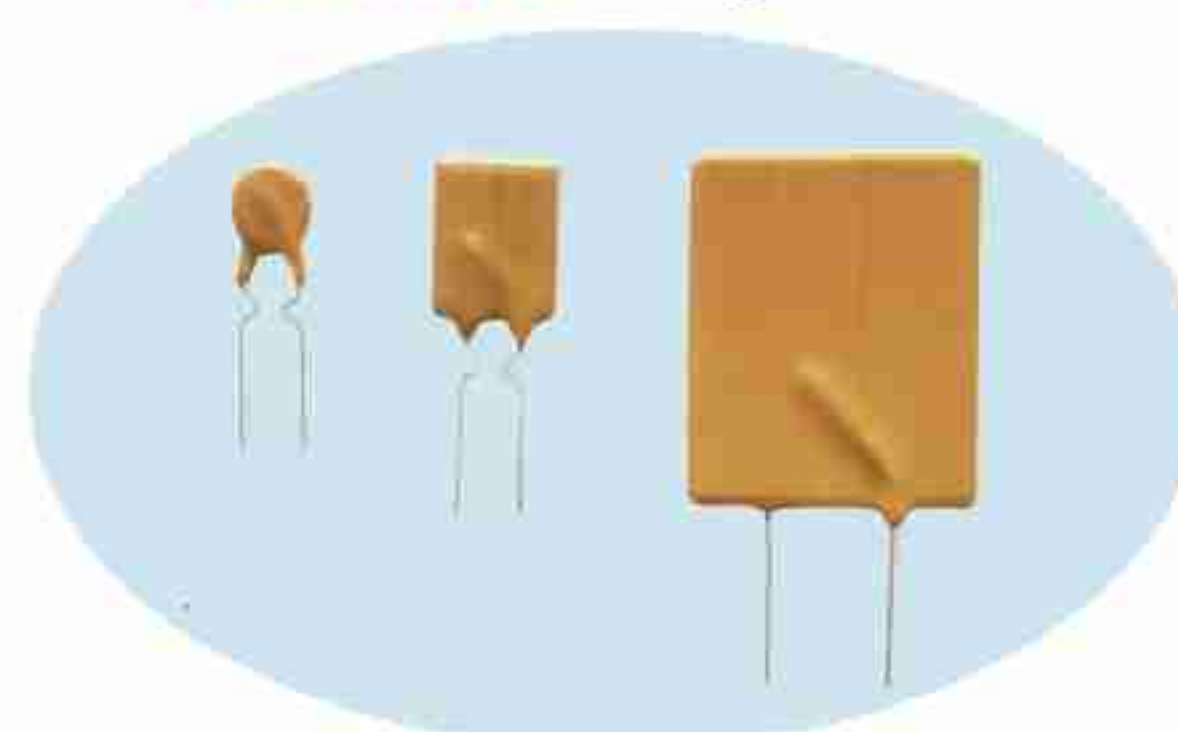


不动作电流代号: 135表示1.35 A
Standby Current Code, e.g., 135 represents 1.35 A

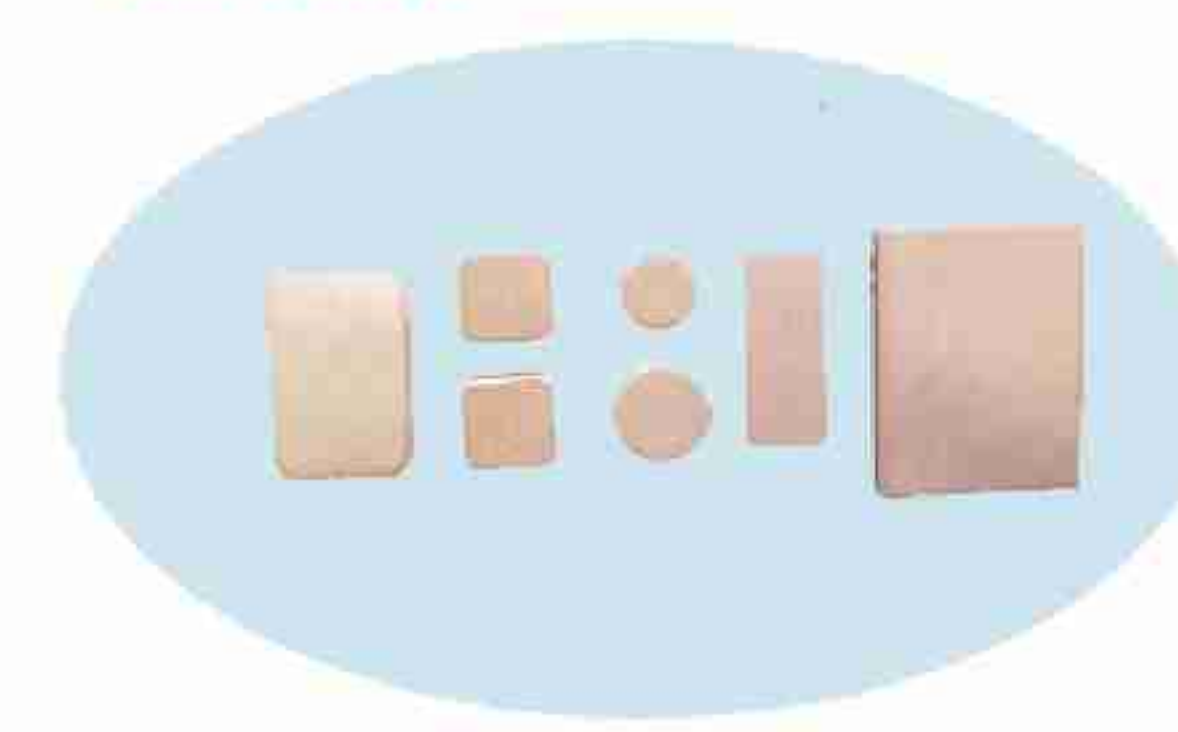
最大工作电压: 6表示Vmax为6 V
Maximum Operating Voltage, e.g., 6 indicates Vmax is 6 V

产品系列代号(电压字母代码): S/6 V、X/60 V、U/30 V、G/16 V、BR/120 V
Product Series Code (Voltage Marking Code), e.g., S/6 V,
X/60 V, U/30 V, G/16 V, BR/120 V

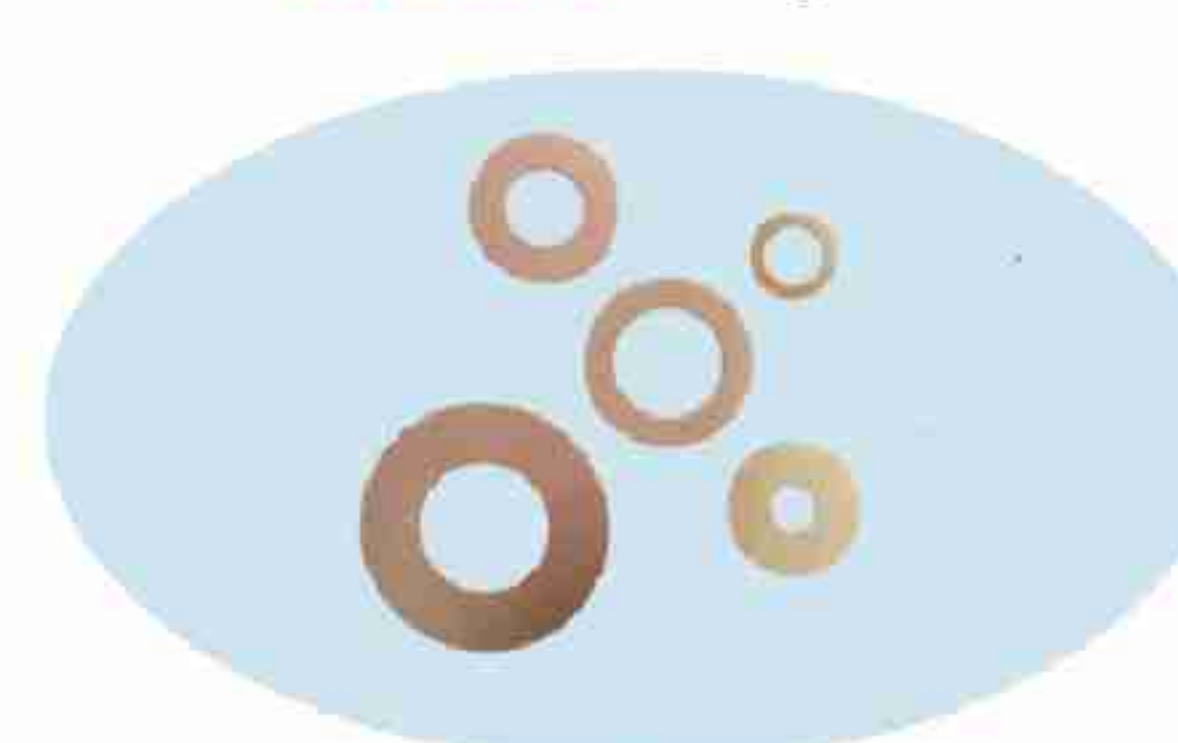
插件系列 Plug-in Series



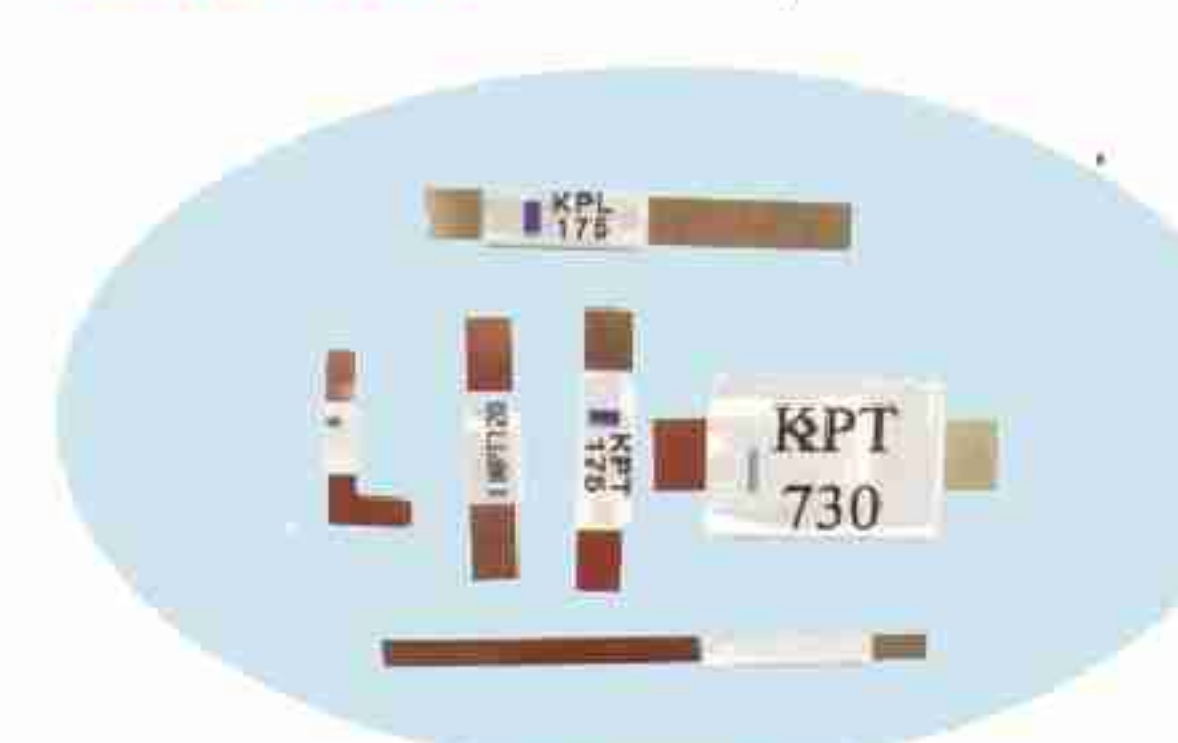
光片系列 Bare Disk Series



环片系列 Ring Series



电池片系列 Battery Cell Series



正温度系数(PTC)热敏电阻器

Positive Temperature Coefficient (PTC) Thermistor

MZ11A 型灯丝预热用PTC热敏电阻器

MZ11A Series PTC Thermistors for Filament Preheating

● 应用范围 Applications

用于各种荧光灯电子镇流器、电子节能灯中，不必改动线路，将适当的热敏电阻器直接跨接在灯管的谐振电容器两端，可以变电子镇流器、电子节能灯的硬启动为预热启动，使灯丝的预热时间达0.2-0.4秒，可延长灯管寿命三倍以上。

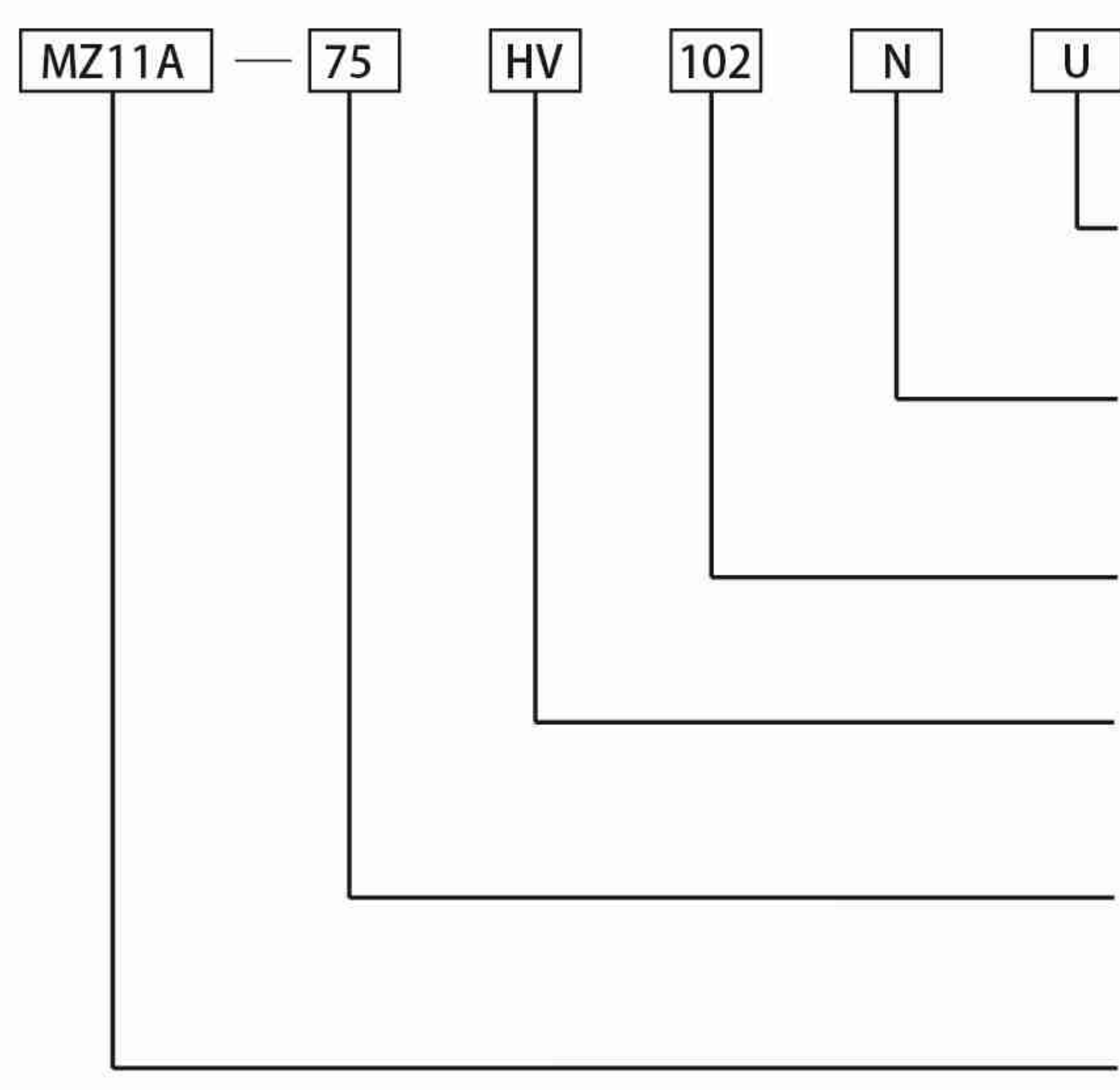
Used in various electronic ballasts and electronic energy-saving lamps. Without modifying the circuit, connect the appropriate PTC thermistor directly across the resonant capacitor at both ends of the lamp. This can transform the hard start of electronic ballasts and electronic energy-saving lamps into preheating start, reducing filament preheating time to 0.4-0.2 seconds and extending the lamp life by more than three times.

● 特点 Features

利用材料PTC特性制作而成，产品体积小、耐电压高，寿命长、正常工作时功耗小。

Utilizing the characteristics of PTC materials, the product is compact, has high voltage resistance, long lifespan, and low power consumption during normal operation.

● 产品标志说明 Marking Instruction



引线形状: U- 内弯, S- 直形, A- 轴弯

Lead Shape: U- Inward Bent, S- Straight, A- Axial Bent

阻值允许偏差代号: N: $\pm 30\%$, V: $\pm 25\%$, M: $\pm 20\%$, K: $\pm 10\%$, X: 其它

Allowable Resistance Value Tolerance Code: N: $\pm 30\%$, V: $\pm 25\%$, M: $\pm 20\%$, K: $\pm 10\%$, X: else

额定零功率电阻: 102: $1000\ \Omega$ 68R: $68\ \Omega$

Rated Zero-Power Resistance: 102: $1000\ \Omega$ 68R: $68\ \Omega$

类型代号: S: 微型, A: 基本型, HV: 高压型, B: 加强型, BHV: 超强型

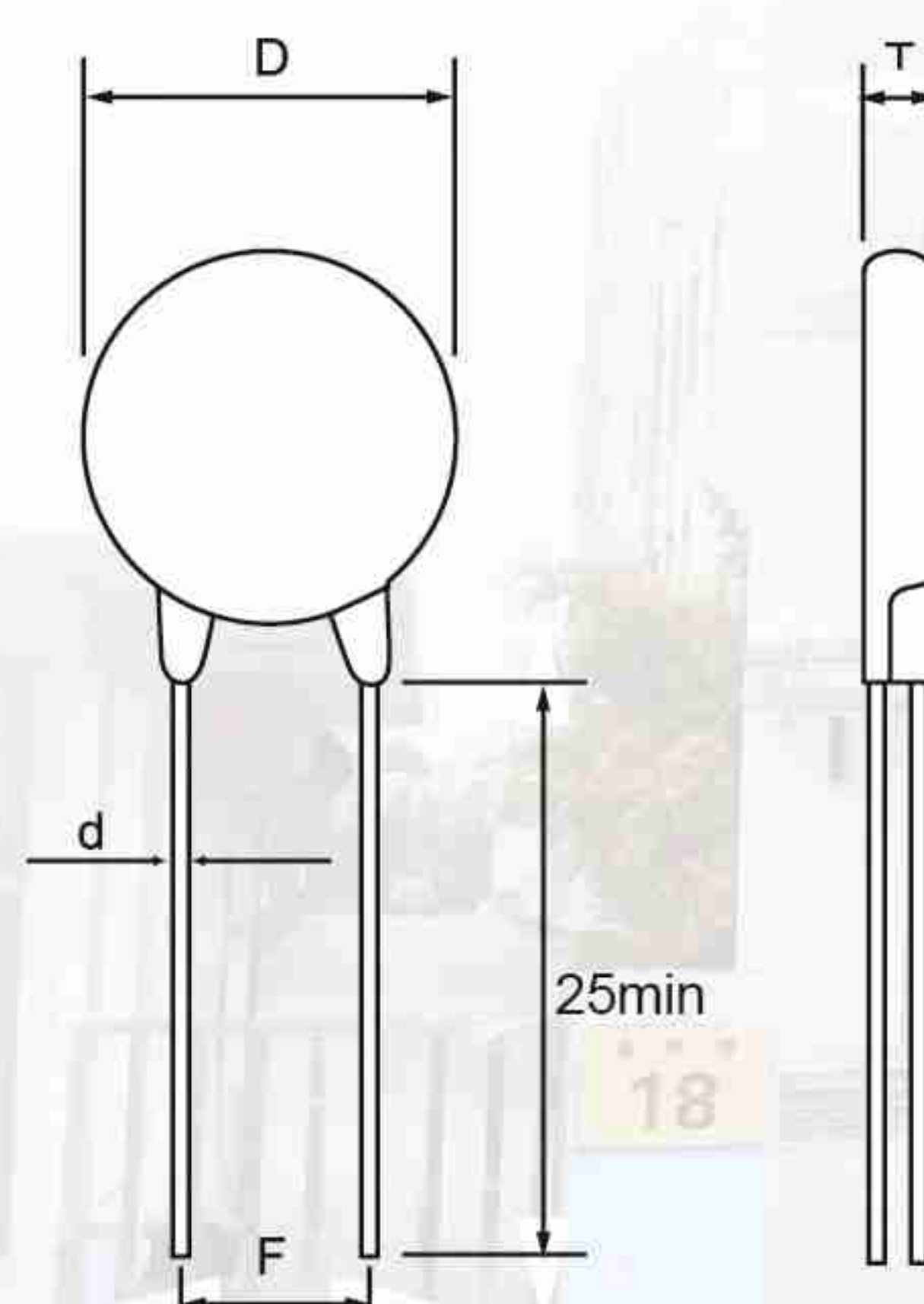
Type code: S: Micro Sized, A: Basic, HV: High Voltage, B: Enhanced, BHV: Superior Type

居里温度: 50-50°C, 75-75°C, 85-85°C, 105-105°C, 120-120°C

Curie Temperature: 50-50°C, 75-75°C, 85-85°C, 105-105°C, 120-120°C

型号 Type

● 外形结构和尺寸 Dimensions (mm)



规格 Part No.	Dmax	Tmax	F ± 1	d ± 0.05
S	4	4.5	5	0.5
L	5	4.5	5	0.6
A	6	4.5	5	0.6
HV	6	5	5	0.6
B	8	4.5	5	0.6
BHV	8	5	5	0.6
LB	9	4.5	5	0.6
M	11.5	5	5	0.6
SL	14.5	5	7.5	0.8
ML	18.5	5	7.5	0.8
ML	21	5	7.5	0.8

MZ11A 型灯丝预热用PTC热敏电阻器

MZ11A Series PTC Thermistors for Filament Preheating

● 主要技术参数 Main Technical Specifications

序 号 No.	型 号 Part No.	额定零功率电阻值 Rated Zero-Power Resistance Value R25 (Ω)	耐电压 Voltage Withstand (VAC)	最大工作电流 Maximum Operating Current (mA)	居里温度 Curie Temperature (°C)	外形尺寸 Dimensions (mm)			
						Dmax	Tmax	d	
01	MZ11A-50S101NU	100±30%	400	200	50±7	4	4.5	0.5	
02	MZ11A-50S151NU	150±30%	400						
03	MZ11A-50S471NU	470±30%	600						
04	MZ11A-50S152NU	1500±30%	600	100					
05	MZ11A-75S151NU	100±30%	400	200	75±7	4	4.5	0.5	
06	MZ11A-75S681NU	680±30%	600						
07	MZ11A-75S152NU	1500±30%	600						100
08	MZ11A-105S68RNU	68±30%	360	200	105±7	4	4.5	0.5	
09	MZ11A-105S471NU	470±30%	500						
10	MZ11A-75S152NU	1500±30%	600						100
11	M11A-50A151NU	150±30%	500	400	50±7	6	4.5	0.6	
12	MZ11A-50A471NU	470±30%	600						
13	MZ11A-50A681NU	680±30%	600						300
14	MZ11A-50A152NU	1500±30%	600	150					
15	MZ11A-75A151NU	150±30%	500	400	75±7	6	4.5	0.6	
16	MZ11A-75A471NU	470±30%	600						
17	MZ11A-75A681NU	680±30%	600	300					
18	MZ11A-75A102NU	1000±30%	600						
19	MZ11A-75A152NU	1500±30%	600						150
20	MZ11A-105A101NU	100±30%	400	400	105±7	6	5.0	0.6	
21	MZ11A-105A151NU	150±30%	400						
22	MZ11A-105A471NU	470±30%	600						
23	MZ11A-105A681NU	680±30%	600						300
24	MZ11A-50HV151NU	150±30%	750	400	50±7	6	5.0	0.6	
25	MZ11A-50HV471NU	470±30%	900						
26	MZ11A-50HV681NU	680±30%	900						250
27	MZ11A-50HV152NU	1500±30%	900	150					
28	MZ11A-75HV151NU	150±30%	750	400	75±7	8	4.5	0.6	
29	MZ11A-75HV471NU	470±30%	900						
30	MZ11A-75HV681NU	680±30%	900						250
31	MZ11A-75HV152NU	1500±30%	900						150
32	MZ11A-50B101NU	100±30%	500	800	50±7	8	4.5	0.6	
33	MZ11A-50B151NU	150±30%	500						
34	MZ11A-50B471NU	470±30%	600						450
35	MZ11A-50B681NU	680±30%	600	300					
36	MZ11A-105B101NU	100±30%	500	800	105±7	8	4.5	0.6	
37	MZ11A-105B151NU	150±30%	500						
38	MZ11A-105B471NU	470±30%	600						450

注：当预热时间偏短时，可选阻值较低、居里点温度较高或体积较大的PTC热敏电阻器，反之亦然。另，我公司还可按用户的特殊要求供货。

Note: When the preheating time is relatively short, PTC thermistors with lower resistance values, higher Curie temperatures, or larger sizes can be selected. The opposite is also true.

Additionally, our company can supply products according to the specific requirements of customers.

MYG压敏电阻器

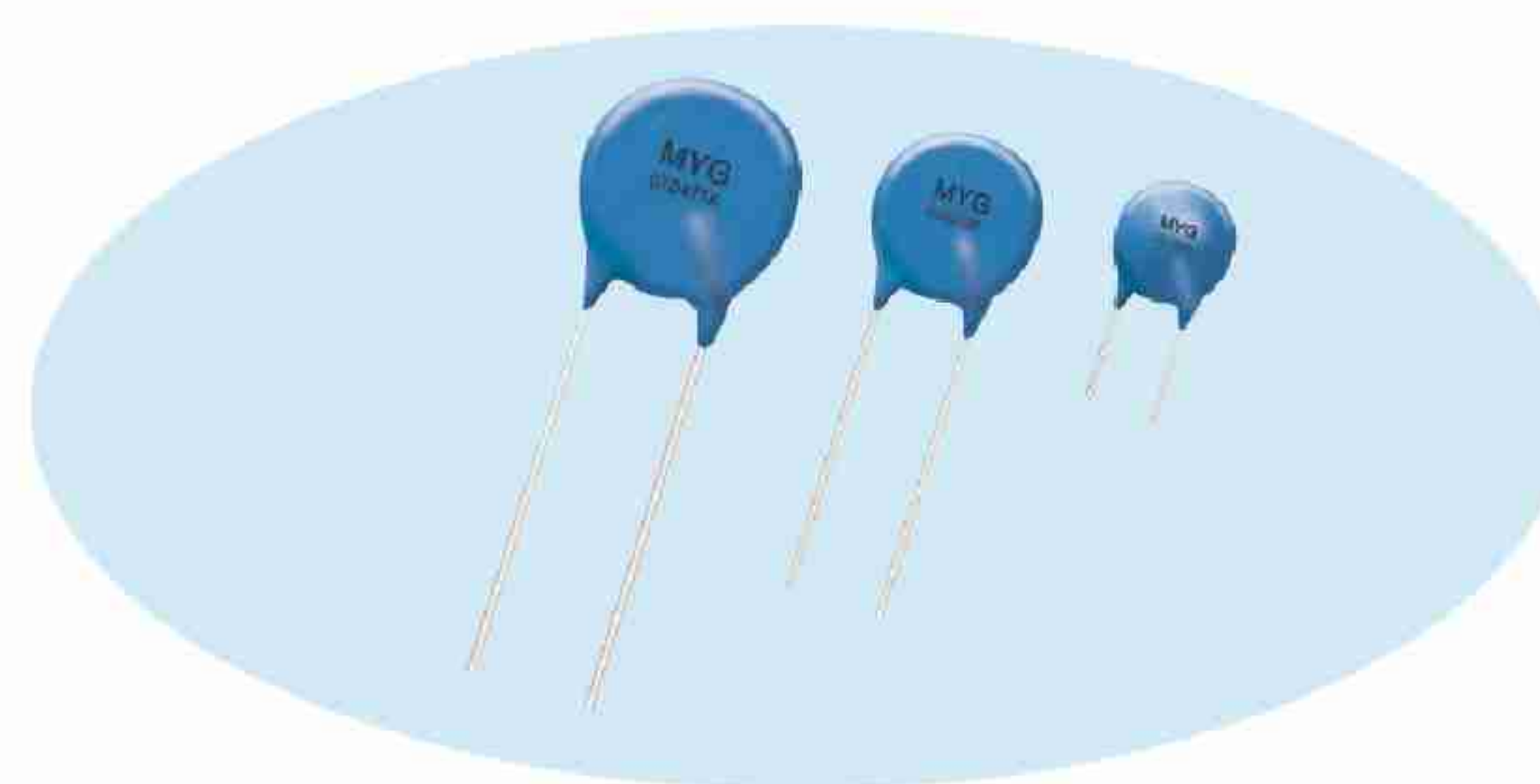
MYG Voltage Varistor

MYG过压保护型压敏电阻器

MYG Series Overvoltage Protection Varistor

● 应用范围 Applications

- 晶体管、二极管、IC、可控硅和半导体开关元件以及各种电子设备过压保护
- 家用电器、工业电器、继电器和电子阀的浪涌吸收
- 静电放电和噪音信号消除
- 漏电保护开关过电压保护
- 电话机、程控交换机等通讯设备防雷及过电压保护



- Overvoltage protection for transistors, diodes, ICs, thyristors, semiconductor switching devices, and various electronic equipment.
- Surge absorption for household appliances, industrial electrical equipment, relays, and electronic valves.
- Electrostatic discharge and noise signal elimination.
- Overvoltage protection for leakage protection switches.
- Lightning and overvoltage protection for telephones, stored program control (SPC), and other communication equipment.

● 特点

- 尺寸小，通流容量和能量耐量大
- 环氧树脂绝缘包封
- 响应时间：<25 ns
- 使用环境温度：-40°C ~ +85°C
- 绝缘阻抗 $\geq 500\text{ M}\Omega$
- 压敏电压温度系数：-0.5%/°C
- 芯片直径为(mm)：5、7、10、14、20、25、32、40、50
- 压敏电压的允许偏差为：K $\pm 10\%$ 、L $\pm 15\%$

Features

- Compact size, high current capacity and high energy tolerance.
- Epoxy resin insulated encapsulation.
- Response time <25 ns.
- Operating environment temperature: -40°C to +85°C.
- Insulation resistance $\geq 500\text{ M}\Omega$.
- Voltage temperature coefficient of varistor: -0.5%/°C.
- Chip diameters available (mm): 5, 7, 10, 14, 20, 25, 32, 40, 50.
- Allowable voltage value tolerance for varistors: K $\pm 10\%$, L $\pm 15\%$.

● 外形结构和尺寸 Dimensions (mm)

见图1 See diagram 1

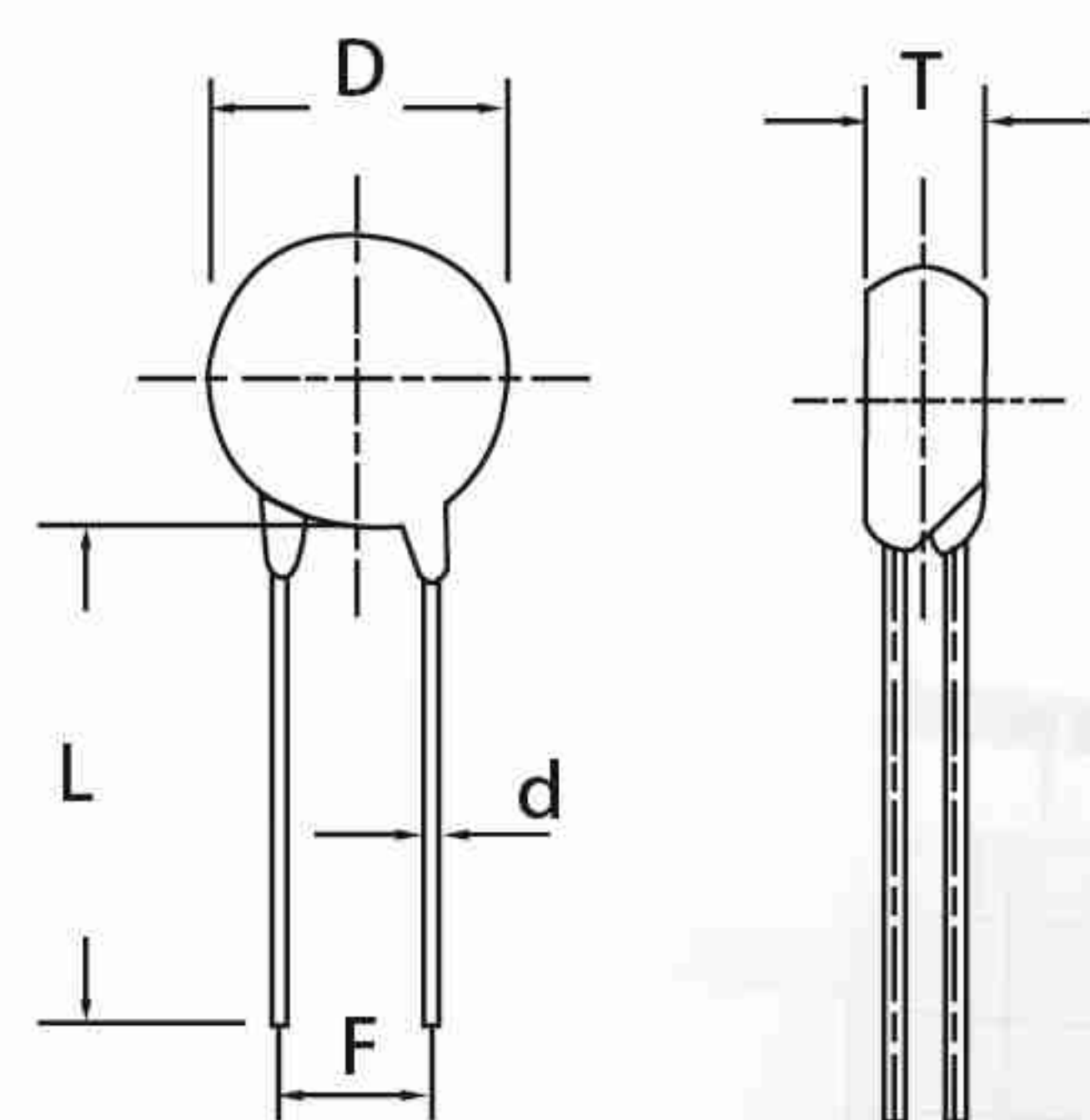


图1 diagram 1

规格 Part No.	产品尺寸 Product Dimensions (mm)				
	Dmax	Tmax	Lmin	F ± 1	d ± 0.1
05D	7.5	6	20	5	0.6
07D	9	6	20	5	0.6
10D	14	8	25	7.5	0.8
14D	17	12	25	7.5	0.8
20D	25	12	25	10	1.0
25D	30	12	25	12.5	1.0

见图2 See diagram 2

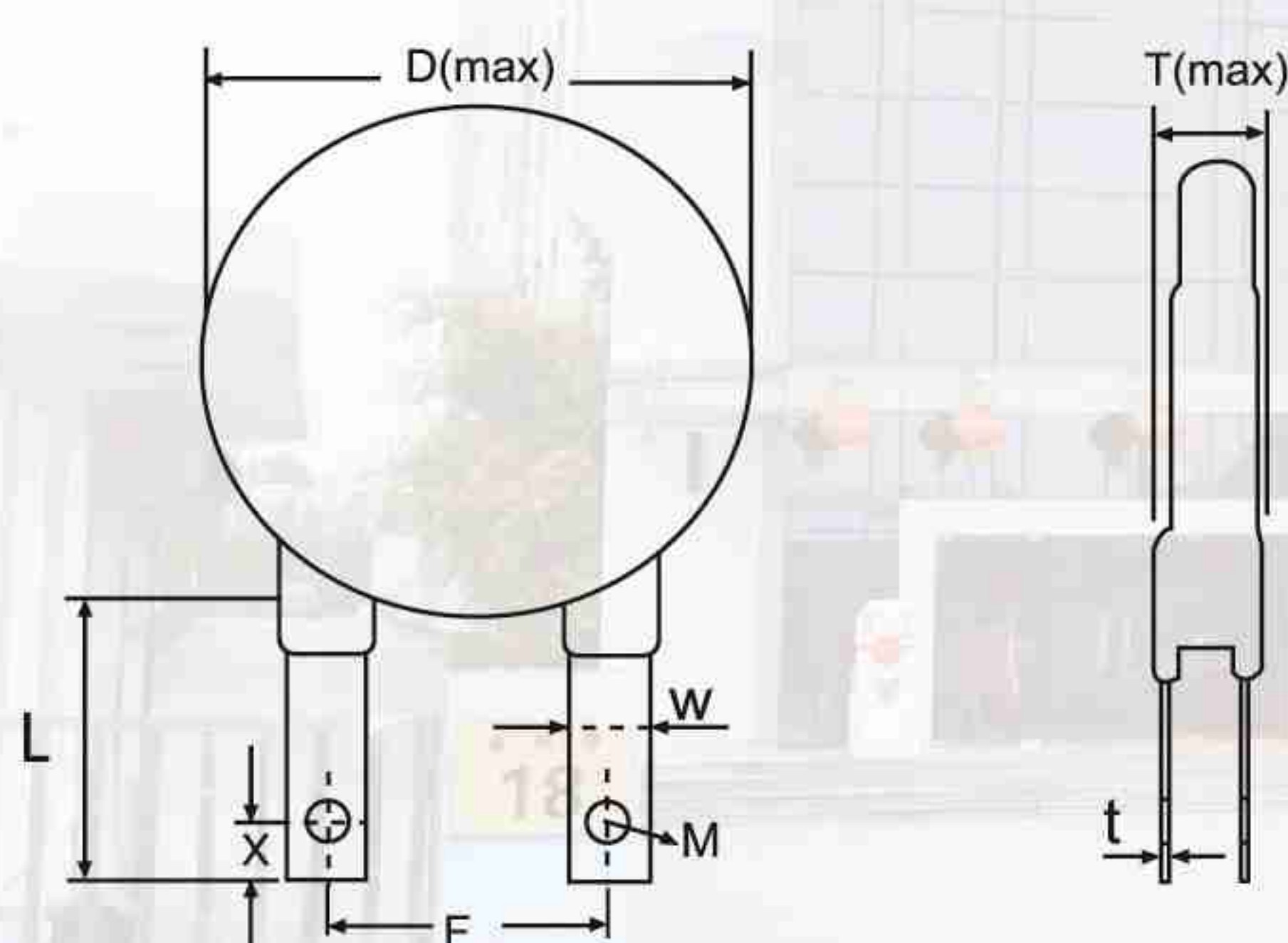


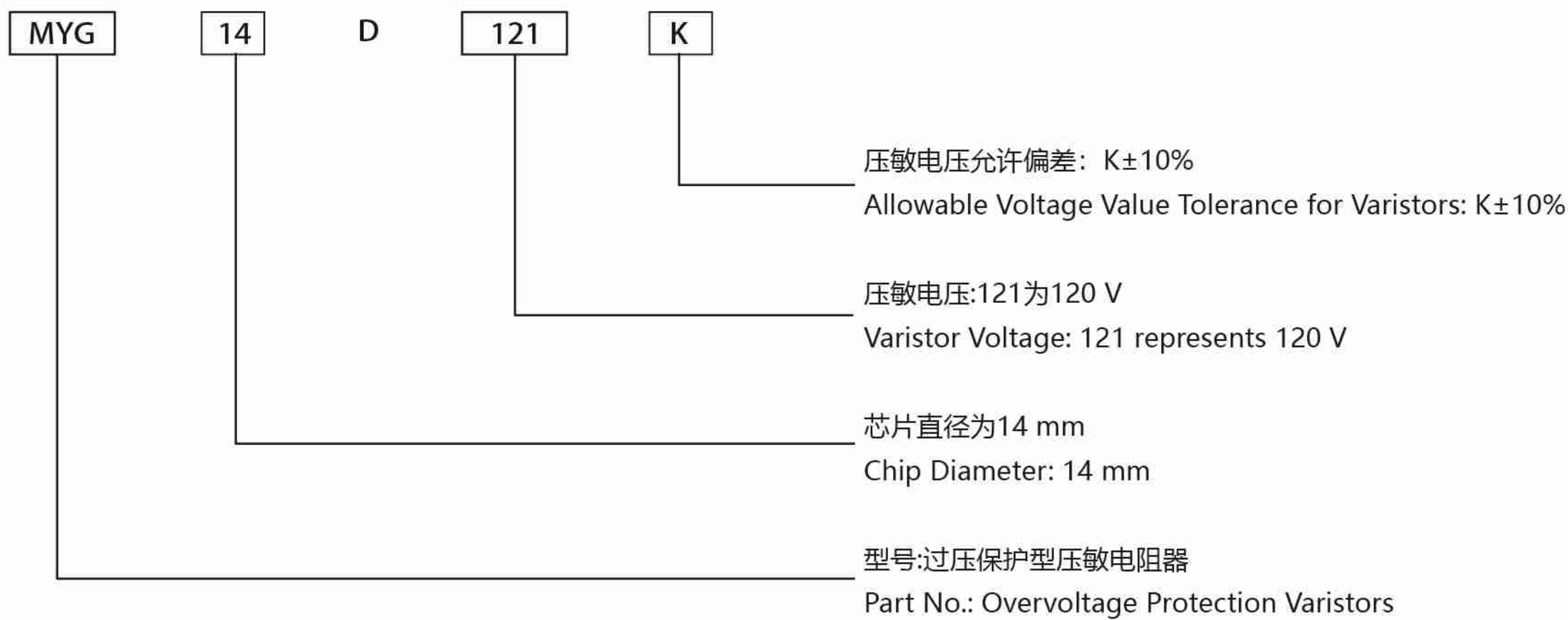
图2 diagram 2

规格 Part No.	产品尺寸 Product Dimensions (mm)							
	Dmax	Tmax	Lmin	F ± 1	W ± 0.5	t ± 0.1	M ± 0.5	X ± 0.3
32D	39	14.5	25	25	7.0	0.5	3.8	3.4
40D	46	15	25	25	7.0	0.5	3.8	3.4
50D	56	16	16.5	25	8.0	0.5	3.8	3.4

MYG过压保护型压敏电阻器

MYG Series Overvoltage Protection Varistor

● 产品标志说明 Marking Instruction



● 主要技术参数 Main Technical Specifications

型 号 Part No.	最大连续工作电压 Max allowable Operating Voltage		压敏电压 Varistor Voltage	最大限制电压 Max Clamping Voltage		通流容量 Capacity withstand in Surge Current (8/20us)		最大能量 Max Energy (J)		额定功率 Rated Power	电容量 Capacitance
	AC (V)	DC (V)	V 1mA (V)	V _p (A)	I _p (A)	1次 Once (A)	2次 Twice (A)	10/1000 us	2 ms	W	1KHZ (pF)
MYG-05D180K	11	14	18(16-20)	40	1	250	125	0.6	0.5	0.01	1400
MYG-05D220K	14	18	22(20-24)	48	1	250	125	10.7	0.7	0.01	1150
MYG-05D270K	17	22	27(24-30)	60	1	250	125	0.9	0.8	0.01	930
MYG-05D330K	20	26	33(30-36)	73	1	250	125	1.1	0.9	0.01	760
MYG-05D390K	25	31	39(35-43)	86	1	250	125	1.2	1.1	0.01	640
MYG-05D470K	30	38	47(42-52)	104	1	250	125	1.5	1.4	0.01	530
MYG-05D680K	40	56	68(61-75)	145	1	250	145	2.2	2.0	0.01	370
MYG-05D391K	250	320	390(351-429)	675	5	800	600	17	12	0.10	65
MYG-05D471K	300	385	470(423-517)	810	5	800	600	21	15	0.10	55
MYG-05D511K	320	415	510(459-561)	845	5	800	600	22.5	16	0.10	50
MYG-05D651K	350	460	560(504-616)	920	5	800	600	24	17	0.10	45
MYG-07D180K	11	14	18(16-20)	36	2.5	500	250	2.0	1.0	0.02	2800
MYG-07D220K	14	18	22(20-24)	43	2.5	500	250	2.0	1.3	0.02	2300
MYG-07D330K	20	26	33(30-36)	65	2.5	500	250	4.0	1.9	0.02	1500
MYG-07D390K	25	31	39(35-43)	77	2.5	500	250	4.0	2.3	0.02	1300
MYG-07D470K	30	38	47(42-52)	93	2.5	500	250	4.0	2.8	0.02	1100
MYG-07D560K	35	45	56(50-62)	110	2.5	500	252	4.0	3.3	0.02	890
MYG-07D680K	40	56	68(61-75)	135	2.5	500	250	4.0	4.1	0.02	740
MYG-07D820K	50	65	82(74-90)	135	10	1750	1250	4.0	4.8	0.25	600
MYG-07D151L	95	125	150(135-165)	250	10	1750	1250	13	9.0	0.25	330
MYG-07D201L	130	170	200(185-225)	340	10	1750	1250	17.5	12.5	0.25	250
MYG-07D221K	140	180	220(198-242)	360	10	1750	1250	19	13.5	0.25	230
MYG-07D271K	175	225	270(243-297)	455	10	1750	1250	24	17	0.25	185
MYG-07D331K	210	275	330(297-363)	550	10	1750	1250	28	20	0.25	150
MYG-07D361K	230	300	360(324-396)	595	10	1750	1250	32	23	0.25	140
MYG-07D391K	250	320	390(351-429)	650	10	1750	1250	35	25	0.25	130
MYG-07D471K	300	385	470(423-571)	775	10	1750	1250	45	30	0.25	105
MYG-07D511K	320	415	510(495-561)	845	10	1750	1250	49	32	0.25	100

MYG过压保护型压敏电阻器

MYG Series Overvoltage Protection Varistor

● 主要技术参数 Main Technical Specifications

型 号 Part No.	最大连续工作电压 Max allowable Operating Voltage		压敏电压 Varistor Voltage	最大限制电压 Max Clamping Voltage		通流容量 Capacity withstand in Surge Current (8/20us)		最大能量 Max Energy (J)		额定功率 Rated Power	电容量 Capacitance
	AC (V)	DC (V)	V 1mA (V)	Vp (A)	Ip (A)	1次 Once (A)	2次 Twice (A)	10/1000 us	2ms	W	1KHZ (pF)
MYG-07D561K	350	460	560(504-616)	920	10	1750	1250	55	35	0.25	90
MYG-07D681K	420	560	680(612-748)	1120	10	1750	1250	60	42	0.25	75
MYG-10D220K	14	18	22(20-24)	43	5	1000	500	5.0	2.6	0.05	4500
MYG-10D330K	20	26	33(30-36)	65	5	1000	500	7.0	3.9	0.05	3000
MYG-10D390K	25	31	39(35-43)	77	5	1000	500	9.0	4.7	0.05	2400
MYG-10D470K	30	38	47(42-52)	93	5	1000	500	11.0	5.6	0.05	2100
MYG-10D680K	40	56	68(61-75)	135	5	1000	500	15.0	8.1	0.05	1500
MYG-10D820K	50	65	82(74-90)	135	25	3500	2500	17.0	9.8	0.4	1200
MYG-10D151K	95	125	150(135-165)	250	25	3500	2500	25	18	0.4	670
MYG-10D201K	130	170	200(185-225)	340	25	3500	2500	35	25	0.4	500
MYG-10D361K	230	300	360(324-396)	595	25	3500	2500	65	45	0.4	280
MYG-10D391K	250	320	390(351-429)	650	25	3500	2500	70	50	0.4	260
MYG-10D471k	300	385	470(423-517)	775	25	3500	2500	85	60	0.4	210
MYG-10D511k	320	415	510(459-561)	845	25	3500	2500	92	67	0.4	200
MYG-10D561k	350	460	560(504-616)	925	25	3500	2500	92	67	0.4	180
MYG-10D681k	420	560	680(612-748)	1120	25	3500	2500	92	67	0.4	150
MYG-10D911k	550	745	910(819-1001)	1500	25	3500	2500	130	90	0.4	110
MYG-14D220k	14	18	22(20-24)	43	10	2000	1000	8.0	5.7	0.10	9100
MYG-14D330k	20	26	33(30-36)	65	10	2000	1000	12.0	8.4	0.10	6100
MYG-14D470k	30	38	47(42-52)	93	10	2000	1000	17.0	11.9	0.10	4300
MYG-14D820k	50	65	82(74-90)	135	50	6000	5000	27.0	20.5	0.60	2400
MYG-14D151k	95	125	150(135-165)	250	50	6500	5000	53	37.5	0.60	1300
MYG-14D201k	130	170	200(185-225)	340	50	6500	5000	70	50	0.60	1000
MYG-14D221k	140	180	220(198-242)	360	50	6500	5000	78	55	0.60	900
MYG-14D241k	150	200	240(216-264)	395	50	6500	5000	84	60	0.60	830
MYG-14D361k	230	300	360(324-396)	595	50	6500	5000	130	90	0.60	560
MYG-14D391k	250	320	390(351-429)	650	50	6500	5000	140	100	0.60	510
MYG-14D471k	300	385	470(423-517)	775	50	6500	5000	175	125	0.60	430
MYG-14D511k	320	415	510(459-561)	845	50	6500	5000	190	136	0.60	390
MYG-14D681k	420	560	680(612-748)	1120	50	6500	5000	190	136	0.60	290
MYG-14D821k	510	670	820(738-902)	1355	50	6500	5000	235	165	0.60	240
MYG-14D911k	550	745	910(819-1001)	1500	50	6500	5000	255	180	0.60	220
MYG-20D390K	25	31	39(35-43)	77	20	3000	2000	28.0	24.0	0.20	8500
MYG-20D151K	95	125	150(135-165)	250	100	13000	7000	106	75.0	1.00	2700
MYG-20D241K	150	200	240(216-264)	395	100	13000	7000	168	120	1.00	1650
MYG-20D361K	230	300	360(324-396)	595	100	15000	7000	255	180	1.00	1100
MYG-20D391K	250	320	390(351-429)	650	100	13000	7000	275	195	1.00	1000
MYG-20D431K	275	350	430(387-473)	710	100	13000	7000	305	215	1.00	930
MYG-20D471K	300	385	470(423-517)	775	100	13000	7000	350	250	1.00	850
MYG-20D511K	320	415	510(459-561)	845	100	13000	7000	382	273	1.00	780

MYG过压保护型压敏电阻器

MYG Series Overvoltage Protection Varistor

● 主要技术参数 Main Technical Specifications

型 号 Part No.	最大连续工作电压 Max allowable Operating Voltage		压敏电压 Varistor Voltage	最大限制电压 Max Clamping Voltage		通流容量 Capacity withstand in Surge Current (8/20us)		最大能量 Max Energy (J)		额定功率 Rated Power	电容量 Capacitance
	AC (V)	DC (V)	V 1mA (V)	Vp (A)	Ip (A)	1次 Once (A)	2次 Twice (A)	10/1000 us	2 ms	W	1KHZ (pF)
MYG-20D681K	420	560	680(612-748)	1120	100	10000	7000	380	273	1.00	600
MYG-20D911K	550	745	910(819-1001)	1500	100	10000	7000	510	360	1.00	440
MYG-25D201K	130	170	200(185-225)	340	150	20000	14000	190.0	140.0		3200
MYG-25D241K	150	200	240(216-264)	395	150	20000	14000	220.0	160.0		2650
MYG-25D391K	250	320	390(351-429)	650	150	20000	14000	360.0	260.0		1600
MYG-25D471K	300	385	470(423-517)	775	150	20000	14000	440.0	300.0		1400
MYG-25D561K	350	460	560(504-616)	925	150	20000	14000	440.0	300.0		1150
MYG-25D681K	420	560	680(612-748)	1120	150	20000	14000	460.0	320.0		950
MYG-25D911K	550	745	910(819-1001)	1500	150	20000	14000	620.0	430.0		700
MYG-32D121K	75	100	120(108-132)	200	40	8000	5000		80	0.25	10000
MYG-32D181K	115	150	180(162-198)	340	40	8000	5000		100	0.25	7000
MYG-32D201K	130	170	200(180-220)	340	200	15000	10000		200	1.00	4600
MYG-32D271K	175	225	270(243-297)	455	200	15000	10000		240	1.00	3400
MYG-32D391K	250	320	390(351-429)	650	200	15000	10000		330	1.00	2300
MYG-32D471K	300	385	470(423-517)	775	200	15000	10000		360	1.00	2100
MYG-32D561K	350	455	560(504-616)	945	200	15000	10000		390	1.00	1700
MYG-32D621K	380	505	620(558-682)	1025	200	15000	10000		390	1.00	1500
MYG-32D681K	420	560	680(612-748)	1120	200	15000	10000		400	1.00	1300
MYG-32D821K	510	670	820(738-902)	1355	200	15000	10000		500	1.00	1200
MYG-32D911K	550	745	910(819-1001)	1500	200	15000	10000		550	1.00	1100
MYG-32D112K	680	895	1100(990-1210)	1815	200	15000	10000		650	1.00	900
MYG-40D121K	75	100	120(108-132)	200	100	15000	10000		120	0.30	16000
MYG-40D181K	115	150	180(162-198)	300	100	15000	10000		140	1.20	10000
MYG-40D201K	130	170	200(180-220)	340	250	30000	20000		270	1.20	6200
MYG-40D271K	175	225	270(243-297)	455	250	30000	20000		300	1.20	4800
MYG-40D391K	250	320	390(354-429)	650	250	40000	25000		370	1.20	3400
MYG-40D471K	300	385	470(423-517)	775	250	40000	25000		430	1.20	2800
MYG-40D681K	420	560	680(612-748)	1025	250	40000	25000		600	1.20	1900
MYG-40D911K	550	745	910(819-1001)	1500	250	40000	25000		750	1.20	1500
MYG-40D112K	680	895	1100(989-1210)	1815	250	40000	25000		900	1.20	1200
MYG-50D201K	130	170	200(180-220)	340	300	40000	25000		310	1.40	12000
MYG-50D271K	175	225	270(243-297)	455	300	40000	25000		380	1.40	7500
MYG-50D391K	250	320	390(351-429)	650	300	50000	30000		490	1.40	4100
MYG-50D471K	300	385	470(423-517)	775	300	50000	30000		590	1.40	3400
MYG-50D681K	420	560	680(612-748)	1120	300	50000	30000		830	1.40	2550
MYG-50D911K	550	745	910(819-1001)	1500	300	50000	30000		960	1.40	2100
MYG-50D112K	680	895	1100(990-1210)	1815	300	50000	30000		1100	1.40	1750

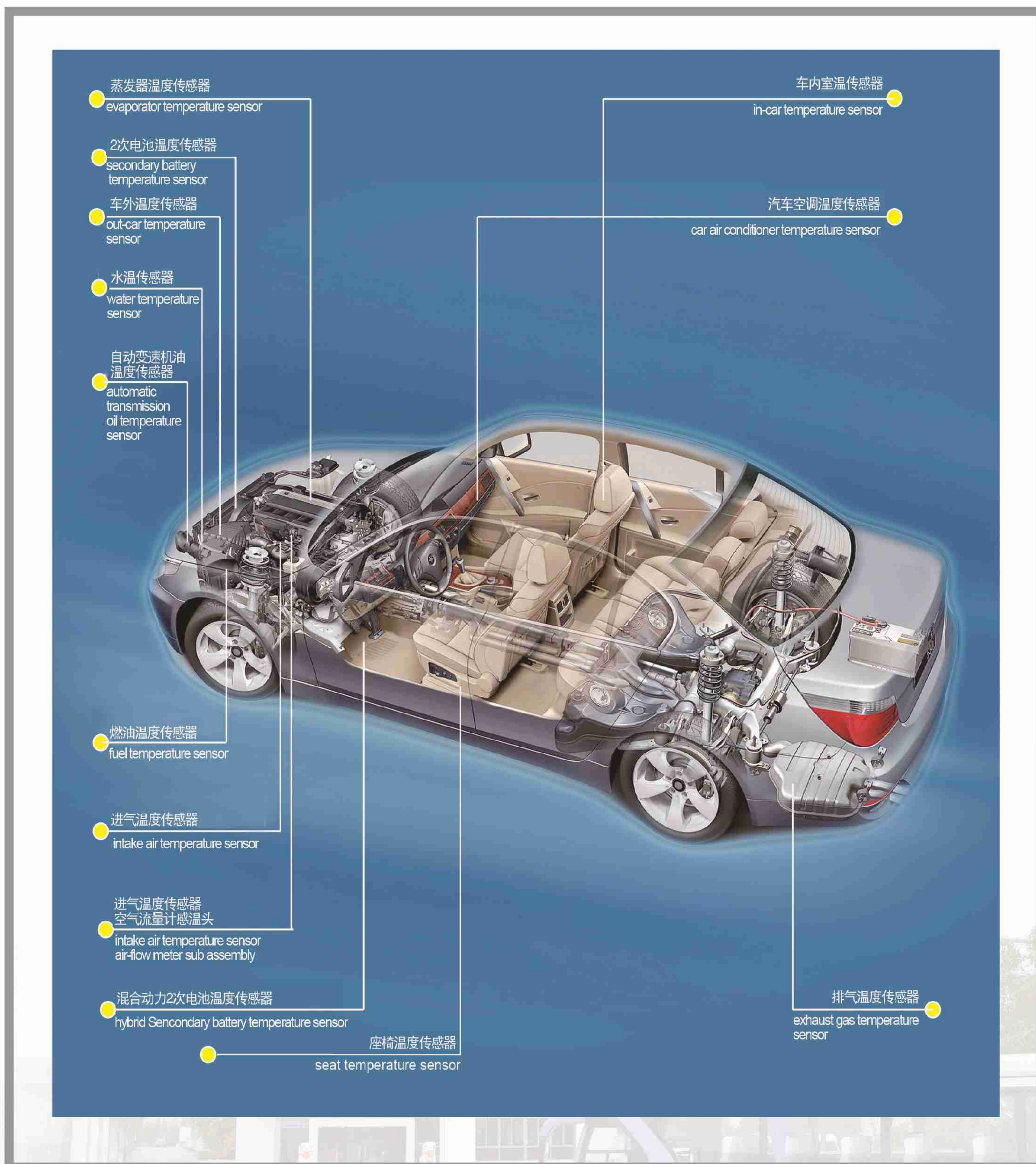
车用NTC温度传感器

Automotive NTC Temperature Sensor

采用多项具有自主知识产权核心技术生产的NTC温度传感器具有测温精度高、反应速度快、一致性好、可靠性高、使用寿命长等特点，被广泛应用于各类乘用车、工程、商务以及新能源汽车。

Manufactured with proprietary core technologies, our automotive NTC temperature sensors deliver high temperature measurement accuracy, fast response time, excellent consistency, high reliability, and extended service life.

They are widely applied in passenger vehicles, commercial vehicles, engineering vehicles, and electric vehicles.



企业精神：创新 高效 和谐 诚信

Corporate Values: Innovation, Efficiency, Collaboration, Integrity



微信公众号

Wechat Official Account



中文官网

Chinese Website



英文官网

English Website

公司地址：南京市江宁区湖熟街道金阳路 18 号
中文官网：www.shiheng.com.cn
邮箱：sales@shiheng.com.cn
电话：025-5239-0195
邮编：211121

Add: No.18, Jinyang Road, Hushu Town, Jiangning District, Nanjing City
Website: www.ntcshiheng.com
E-mail: GlobalSales@shiheng.com.cn