负温度系数(NTC)热敏电阻器

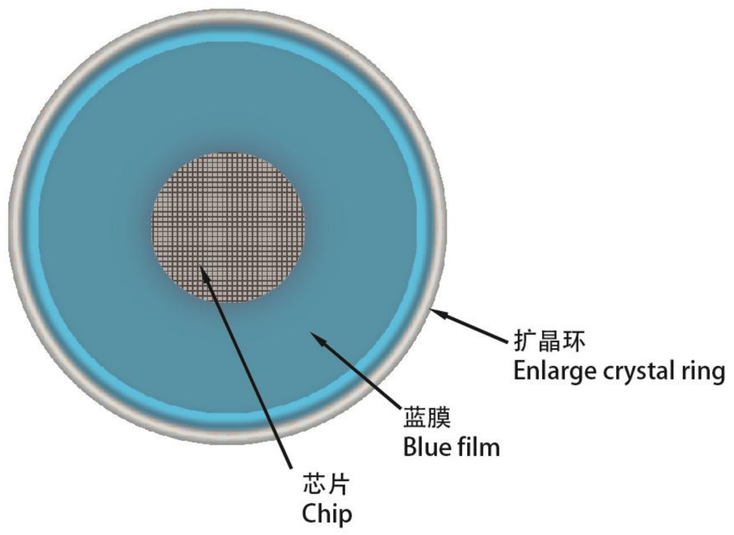
Negative Temperature Coefficient (NTC) Thermistor

热敏电阻器蓝膜芯片系列

Blue Film Chip-Type 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, as a unique packaging form originate from the bonding technology, are designed for automated production. This method, compared to traditional SMT, boosts efficiency, lowers costs, and improves corrosion resistance, shock resistance, and stability for an extended 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 Speed.
◎ 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 Module, Thermoelectric Stack.
◎ Integrated Module, Information Control Module.
◎ Semiconductor Laser/Detector.
◎ Heat Pipe Reactor Controller.

● 安规认证 Certifications

UL1434认证
UL1434 Certification
(File# E240991)

CQC 认证
CQC Certification
(File# 09001033986)

● 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}): 2K～500KΩ
◎ 阻值允许偏差代号: F: ±1% G: ±2% H: ±3%
J: ±5% E: ±0.5%
◎ B值 (25/50℃)：3380K~4480K
◎ B值允许偏差代号: F: ±1% G: ±2% H: ±3% J: ±5%
E: ±0.5% D: ±0.3% C: ±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 Pw (见下表)
◎ 工作温度范围: -40℃～+125℃

● Main Technical Specifications

◎ Core chip dimensions (See Table Below), customizable according to customer requirements.
◎ Nominal Zero-Power Resistance Value (R_{25}): 2K to 500KΩ.
◎ Allowable Resistance Value Tolerance Code: F: ±1%, G: ±2%, H: ±3% , J: ±5% , E: ±0.5%
◎ B Value (25/50℃): 3380K to 4480K.
◎ Allowable B Value Tolerance Code (Label as needed): F: ±1%, G: ±2% , H: ±3% , J: ±5%
E: ±0.5%, D:±0.3%, C:±0.2%
◎ Dissipation Constant δ (See table below)
◎ Thermal Time Constant in Still Air τ (See Table Below)
◎ Rated Power Pw (See Table Below)
◎ Operating Temperature Range: -40℃ to +125℃.

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℃时最大额定功耗 Max. Power Rating at 25℃
				δ (mW/℃)	τ (s)	Pmax (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℃→25℃，油中测试
Thermal Time Constant is tested in oil from 50℃ to 25℃.

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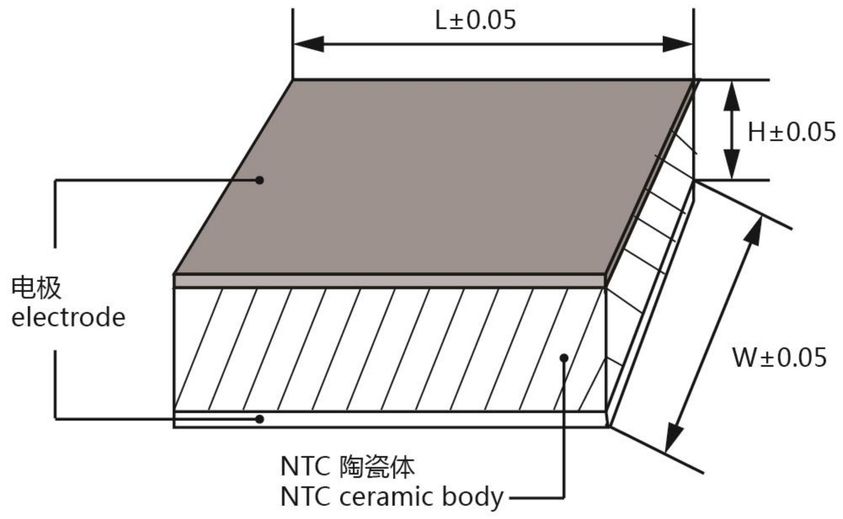
● 外形结构和尺寸 Dimensions (mm)



● 产品标志说明 Marking Instruction

MF52/58 C 104 F 3950 E A A B M

包装方式：蓝膜 Packing Method: Blue Film.

适应焊接方式：B型为邦定焊接方式
Applicable Welding Method: B is for bonding welding.

电极材料:A为银电极（G为金电极）
Electrode Material: A for silver electrodes. (G for gold electrodes.)

B值测量温度: 为25/50℃
B-Value Measured Temperature: A is 25℃/50℃

B值允许偏差代码: E: ±0.5% F: ±1% G: ±2% H: ±3% J: ±5% ；
Allowable B Value Tolerance Code: E: ±0.5%, F: ±1%, G: ±2% , H: ±3%, J: ±5%;

B值: 3950K B Value: 3950K

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

额定零功率电阻值：104为100KΩ
Rated Zero-Power Resistance Value: 104 represents 100KΩ

热敏电阻成品为芯片
The finished thermistor product is in chip form.

测温型NTC 热敏电阻器系列
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● 认证与检测

◎ 质量管理体系认证 IS09001: 2015
IATF16949: 2016
◎ 环境管理体系认证 IS014001: 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: 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: CQC 09001033986
◎ UL/C-UL approvals: E240991
◎ Passed 100,000-cycle Durability Test per UL Standards
◎ Passed AEC-Q200 Testing: 20172052558G
◎ Passed RoHS Environmental Testing Report