



产 品 规 格 书

PRODUCT SPECIFICATION

客 户 名 称: CUSTOMER:	
产 品 名 称: PRODUCT NAME:	温度保险丝
产 品 描 述: Product description:	温度保险丝
型 号/ 规 格: Model/specification:	D9-145℃ 5A250V
料号: Material Number	
日 期: Date:	2025 年 03 月 03 日

供应商-泓达 Supplier-Hongda		确认合格章 Confirm qualified Signet	客 户 Customer	零件承认章 Approval Signet
编 制 PREPARED	李红			
审 核 CHECKED	鲜春			
批 准 APPROVED	孙嘉利			



变更履历

序号	日期	修订内容	版本	文件编号	制 订	审 核
1	2020/7/12	新发文件	A/1	HD/E031006	Jimmy Qian	孙嘉利
2	2020/8/10	CCC 转自我声明	A/2	HD/E031006	Jimmy Qian	孙嘉利



1. 适用范围 Scope of application

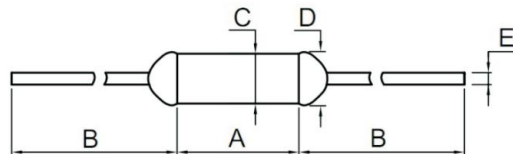
本产品适用于各种电热产品、厨房用小家电、电动机等的电路中起过温保护作用。

This product is suitable for various kinds of electric heater, small kitchen appliances, electromotor etc to work for over temperature protection.

2. 相关标准及认证 Relevant Standards and Certification

2.1 执行标准 Standard: IEC60691 GB9816.1 UL60691

3. 结构及尺寸 Structure and Size (unit: mm)



尺寸 Dimensions (mm)

额定电流	A	B	C	D	E
1A	6.5±0.5	40±3	2.1±0.5	≤2.6	0.5±0.05
2A	9±0.5	40±3	2.5±0.5	≤3.0	0.5±0.05
3A	10±0.5	40±3	3.0±0.5	≤3.5	0.6±0.05
5A	10±0.5	40±3	3.0±0.5	≤3.8	0.6±0.05
10A	15.6±0.5	38±3	4.1±0.5	≤4.5	1.0±0.05
15A	14±0.5	38±3	4.0±0.5	≤4.5	1.2±0.05

4. 原材料明细 Material details

编 号 No.	零 件 名 称 Part Name	材 质 Material
①	引线 Lead	镀锡铜线 Tinned copper wire
②	陶瓷管 Ceramic tube	陶瓷 Ceramic
③	感温元件 Thermal Element	合金线 Alloy

5. 标示 Marking

产品上需有下列标示: The product shall have the following marking :

- 泓达标志: Hongda's logo :
- 型号 : Model: D9
- 认证符号: Approved Symbol:
- 额定电流(A): Ampere Rating(A): 5A
- 额定电压(V): Voltage Rating(V): 250V



6) 额定动作温度: Rated Functioning Temperature: 145°C

6. 外观 Appearance

6.1 外观不应有显著的污点、锈迹或裂纹。

There shall not be any remarkable stain, rust or crack on the appearances.

6.2 标示应该很容易辨识。

Marking shall be easily legible.

7. 温度特性 Temperature characteristics:

7.1 额定动作温度 (T_f) Rated functioning temperature (T_f)

在规定条件下测得的使温度保险丝导电状态发生改变的溫度。温度保险丝必须在上述温度的+0,-10°C 范围以内动作。

The temperature of the thermal cutoff which cause it to change its state of conductive when measured under specified conditions. The temperature tolerance is +0°C~-10°C.

7.2 实际动作温度 Functioning temperature

温度保险丝以每分钟 0.5~1°C 速率上升, 检测电流小于 10 mA 条件下所测得的烤炉中发生动作时的温度。

It is the actual operating temperature when the thermal cutoff is made to operate at the conditions that the temperature is raised at the rate of 0.5°C~1°C per minute and the detection current less than 10 mA.

7.3 保持温度(T_h) Holding temperature(T_h)

温度保险丝在通过额电流时,能够连续维持 168 小时而承受的最高不致其导电状态发生改变的溫度。

The maximum temperature at which the thermal cutoff can be maintained while conducting rated current for 168 hour without functioning.

7.4 最高极限温度(T_m) Maximum temperature limit(T_m)

温度保险丝所能处在的最高温度,在此温度下, 温度保险丝的导电状态已改变,但其机械性能和电气特性在 10 分钟内不致改变。

The maximum temperature at which mechanical and electrical properties of the thermal cutoff can be maintained for 10 minutes without resuming conductivity after functioning.



7.5 额定动作温度，实测动作温度，保持温度，最高极限温度见下表：

Rated functioning temperature，Functioning temperature，Holding temperature，Maximum temperature limit See the table below：

MODEL 型号	Rated functioning temperature 额定动作温度 T_f (°C)	Functioning temperature 实际动作温度(°C)	Holding temperature 保持温度 T_h (°C)	Maximum temperature limit 最高极限温度 T_m (°C)
D1	102	100±2	79	200
D2	115	113±2	91	200
D3	125	123±2	100	200
D4	130	127±2	106	200
D5	133	130±2	111	200
D6	135	130±2	111	200
D7	136	131±2	112	200
D8	139	135±2	115	200
D9	145	140±2	121	200
D10	150	145±2	126	200
D11	160	154±2	135	200
D12	187	182±2	145	200
D13	205	199±2	169	250
D14	221	218±2	188	250

8. 机械特性 Mechanical characteristics:

8.1 拉力强度试验 Tensile test

温度保险丝样品以任何不致伤害到它的方便方式支撑起来,用 10N 的拉力作用到每一只引线上达 1 分钟，每只引线都不能断裂或松开。

The thermal cutoff is to be supported in any convenient manner so as not to damage it and a pull force as 10N applied to each lead wire for 1 minutes, each lead wire shall be no fracture or loosen.

8.2 推力试验 Push test

温度保险丝样品以任何不致伤害到它的方便方式支撑起来，用 3N 的推力作用到每一只引线上达 1 分钟，每只引线都不能断裂或松开。

The thermal cutoff is to be supported in any convenient manner so as not to damage it and a push force as 3N applied to each lead wire for 1 minutes, each lead wire shall be no fracture or loosen.



8.3 扭力实验 Torsion test

温度保险丝样品以任何不致伤害到它的方便方式支撑起来，在每一只引线上距离温度保险丝本体 10 mm 的地方折一个 90 度角，然后照下图所说明的样子扭转 180 度，每只引线都不能断裂或松开。

The thermal cutoff is to be supported in any convenient manner so as not to damage it. Each lead wire is to be bent through 90 degrees at a location 10 mm from the body of thermal cutoff and then twisted through 180 degrees, each lead wire shall be no fracture or loosen.

9. 电气特性 Electrical characteristics:

9.1 绝缘电阻 Insulation Resistance

以额定电压值两倍的直流电压为测量电压，在断开点之间的绝缘电阻必须要有 0.2MΩ 以上。

The insulation resistance is to be measured with a DC Voltage of twice the rated voltage , it must be greater than 0.2MΩ across the breakpoint.

9.2 耐高电压测试 Withstanding High Voltage Test

温度保险丝在断开点之间可承受两倍额定电压值 1 分钟以上。

A thermal cutoff can withstand twice the rated voltage for 1 minute without breakdown between the breakpoint.

10. 焊锡参数 Soldering Parameters

距离 Distance 焊锡时间 Soldering time 温度 Temp.	10mm	15mm	20mm	Soldering Conditions 焊锡条件
96℃ 以下/96℃ Under 96℃	1S	2S	3S	Welding iron or bathroom 烙铁或锡槽 Temperature 温度：300℃
96℃~100℃	2S	3S	4S	
101℃~130℃	3S	4S	5S	
130℃ 以上/Over 130℃	4S	5S	5S	

11. 环境特性 Environmental characteristics

保存条件 Storage Conditions

相对湿度≤75%，可存放 3 年。

Relative humidity≤75%, store 3 years .



12. 包装 Packing

12.1 100PCS/小袋、10 小袋/大袋、10 大袋/外箱(实际装箱依客户订单)。

100 PCS per plastic bag, 10 plastic bags per inner box, 10 inner boxes per external carton.
(The actual case in accordance with the customer order)

12.2 产品符合 RoHS 环保指令。

The product is compliant with RoHS Directive.

13. 其他 Others

13-1 如果在使用中有超出本规格书的要求，心须经由双方协商确认。

In the event that an impropriety is found beyond this specification ,it shall be fixed by mutual agreement between the parties.

13-2 如果本规格书有不适当的情况，必须通过双方协商并由本公司修改。

In the event that an impropriety is found in this specification , HONGDA ELECTRONIC CO., LTD. shall amend it by mutual agreement between the parties.

附：承认书后附安规证书及环保报告

Appendix: The specification attached safety certificate and RoHS directive test report.