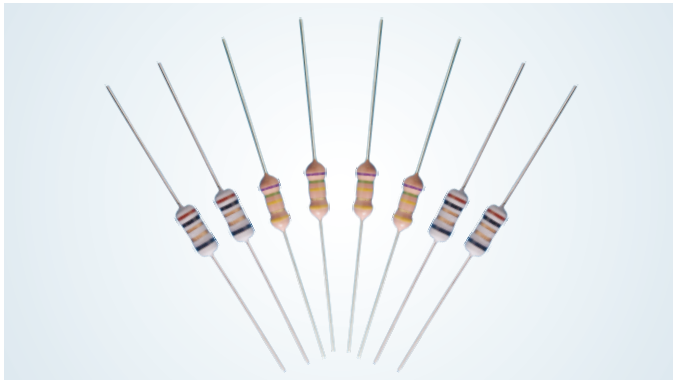


FUSING RESISTOR

RFU 保险电阻器 FUSIBLE RESISTOR (STANDARD TYPE)

RFS 保险电阻器 FUSIBLE RESISTOR (SMALL TYPE)

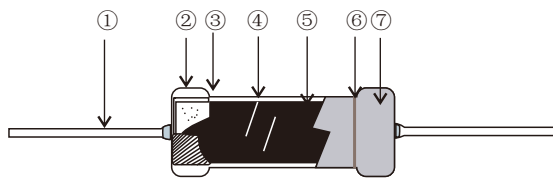


本体颜色: Body Color
 标准品: Standard (Gray 灰色)
 小型品: Small Type (Pink 粉红色)
 标示: Marking
 色环: Color Code (1/4W-3W)
 (根据客户要求提供相应标识)
 (According to the customer request to provide corresponding identification)

特性 Feature

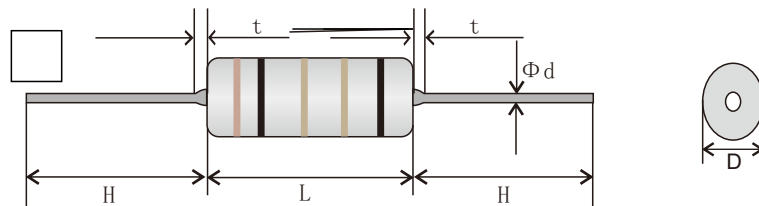
- (1) 正常情况下具备电阻功能。Function as a resistor in normal operation condition.
- (2) 异常过负荷时可快速熔断。Quick fusing protects circuit from excessive over load.
- (3) 产品认证UL 1412 证书号 E341249。 Approvals awarded ; UL1412FileNoE341249
- (4) 产品符合欧盟RoHS要求。Products meet EU-RoHS.

结构图 Construction



| | | | | | | |
|-----------|-----|--------------|------------------------|------|-----------------------|-----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 端子线 | 线帽 | 瓷棒 | 切割线 | 皮膜 | 标示 | 绝缘涂料 |
| lead wire | cap | ceramic base | Helical cutting groove | film | marking or color code | insulation coat |

外形尺寸 Dimensions



| 规格 Type | 尺寸 Dimensions (mm) | | | | | 重量 Weight (g) (1000pcs) |
|-------------------------|--------------------|-------|-----------|-------------|--------|----------------------------|
| | L | t Max | D | Φd | H | |
| RFU 1/6, RFS 1/4 | 3.3 ± 0.3 | 1.5 | 1.7 ± 0.3 | 0.45 ± 0.05 | 27 ± 3 | 120 |
| RFU 1/4, RFU 1/3, RFS 2 | 6.0 ± 0.3 | 1.5 | 2.4 ± 0.3 | 0.6 ± 0.05 | 28 ± 3 | 218 |
| RFU 1/2, RFS 1 | 9 ± 0.5 | 2.0 | 3.0 ± 0.5 | | 30 ± 3 | 320 |
| RFU 1, RFS 2 | 12 ± 1 | 2.5 | 4.5 ± 0.5 | 0.8 ± 0.05 | 38 ± 3 | 780 |
| RFU 2, RFS 3 | 16 ± 1 | 2.5 | 5.5 ± 0.5 | | | 1450 |

● 产品认证 Approvals Awarded

UL 1412 File NO.E341249

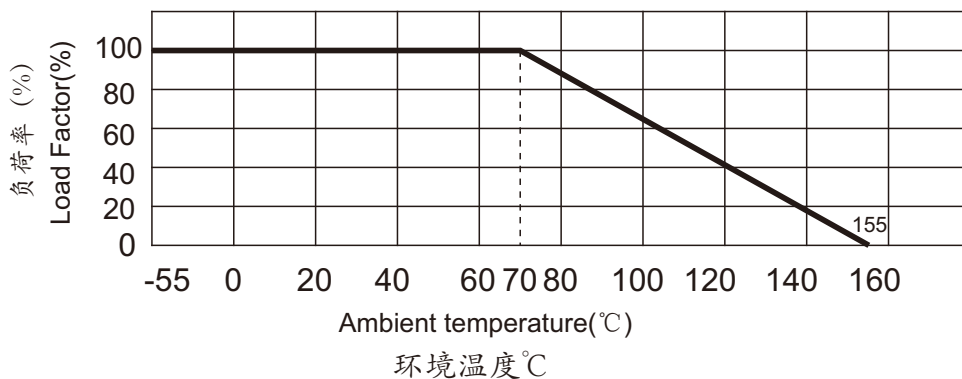
● 参考规格 Reference Standards

JIS C 5201-1

● 功率、阻值范围与耐电压 Power And Resistance etc

| 规格 Type | 阻值范围 Resistance Range(Ω) | 最高使用电压 Max Working Voltage | 最高负荷电压 Max Overload Voltage | 耐电压 Dielectric Withstanding Voltage | 温度系数 T.C.R |
|----------------------------|--------------------------------------|-------------------------------|--------------------------------|--|-----------------------------|
| | J \pm 5% (E24) | | | | |
| RFU 1/6, RFS 1/4 | 0.1-1K | 100V | 150V | 200V | ± 100 PPM/ $^{\circ}$ C |
| RFU 1/4, RFU 1/3 | 0.1-15K | 250V | 300V | 250V | |
| RFS 1/2, RFS 1 | 0.1-33K | 250V | 300V | 250V | |
| RFU 1/2 | 0.1-4.7K | 250V | 300V | 300V | |
| RFU 1, RFU 2, RFS 2, RFS 3 | | 350V | 500V | 300V | |

● 额定温度下降曲线图 Derating Curve



● 熔断特性 Fusing Characteristics (参考用 reference)

FUSING characteristics 熔断特性 (Residual resistance \geq 100 times nominal resistance 残留阻值为公称阻值100倍以上)

| Rated Power | Resistance Range | $\sqrt{40PR}$ | $\sqrt{30PR}$ | $\sqrt{25PR}$ | $\sqrt{16PR}$ | Fusing Time |
|-----------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------|
| RFU1/6W、RFS1/4W | 0.10-1K Ω | 0.10-0.18 Ω | 0.2-0.47 Ω | 0.51-1K Ω | ..... | 60sMAX |
| RFU1/4W、RFU1/3W | 0.10-15K Ω | 0.10-0.22 Ω | ..... | 0.24-9.1 Ω | 10-15K Ω | 60sMAX |
| RFS1/2W | 0.10-33K Ω | ..... | ..... | 0.10-1.0 Ω | 1.1-33K Ω | 60sMAX |
| RFS1W | 0.10-33K Ω | ..... | ..... | 0.10-1.0 Ω | 1.1-33K Ω | 60sMAX |
| RFU1/2W | 0.10-4.7K Ω | 0.10-0.33 Ω | 0.47-0.91 Ω | 1.0-9.1 Ω | 10-4.7K Ω | 60sMAX |
| RFU1W、RFS2W | 0.10-4.7K Ω | ..... | ..... | 0.10-1.0 Ω | 1.1-4.7K Ω | 60sMAX |
| RFU2W、RFS3W | 0.10-4.7K Ω | ..... | ..... | 0.10-1.0 Ω | 1.1-4.7K Ω | 60sMAX |

性能 Performance

| 试验项目 Test Items | 规格值 Performance Requirements | 试验方法 Test Methods(JIS C 5201-1) |
|--------------------------------------|---------------------------------------|--|
| 电阻值 Resistance | 规定的误差值内 Within specified tolerance | 测量点从端盖10mm Measuring points are 10mm from the end cap |
| 温度系数 T.C.R. | 规定值内 Within specified T.C.R | 室温+100°C Room temperature+100°C |
| 短时间过负荷 Short time overload | ±(2%R+0.05Ω) | 4倍额定功率, 5秒 4 times the rated power for 5 seconds |
| 负荷寿命 Load life | ±(5%R+0.1Ω) | Rated voltage at 70°C for 1,000 hours 1.5hr ON/0.5hr OFF Cycles |
| 耐湿负荷寿命 Load life in humidity | ±(5%R+0.1Ω) | 额定电压40°C, 95% RH, 1000小时 Rated voltage at 40°C, 95%RH for 1,000 hours |
| 耐湿性 Moisture resistance | ±(1%R+0.05Ω) | 40°C, 95% RH, 240小时 40°C, 95%RH for 240 hours |
| 温度循环 Temperature cycle | ±(1%R+0.05Ω) | At -55°C for 30min, time at +25°C for 10-15min, time at +155°C for 30min, time at +25°C for 10-15min, total 5cycles. |
| 焊锡效果 Solderability | 95%(min)coverage | Temp. of solder 245°C ± 5°C duration of immersion 3s ± 0.5s |
| 焊锡耐热 Resistance to soldering heat | ±(1%R+0.05Ω) | 260°C ± 5°C for 10 seconds(焊锡槽) 350°C ± 10°C for 3.5 seconds(手焊锡) |
| 绝缘电阻 Insulation resistance | > 1,000MΩ | 500V绝缘测试1分钟 500V insulation test 1min. |

料号编号 ordering Information

例 example

| | | | | | | |
|------------|-----------------------|---|------------------|---|-----------------|--------------------|
| RFU | U | 14 | J | R100 | A520 | NH |
| 型号 Type | 品名 Size | 额定功率 Rated Power | 误差值 Tolerance | 电阻值 (Ω) Resistance | 二次加工 Forming | 端子线 Lead Wire |
| | U:Standard S:Small | 14:1/4W 12:1/2W 01:1W 02:2W 03:3W | J ± 5% | R100=0.1 1R00=1 10R0=10 1000=100 | | 热镀线 Heat Plated |