

TR 140功率厚膜电阻

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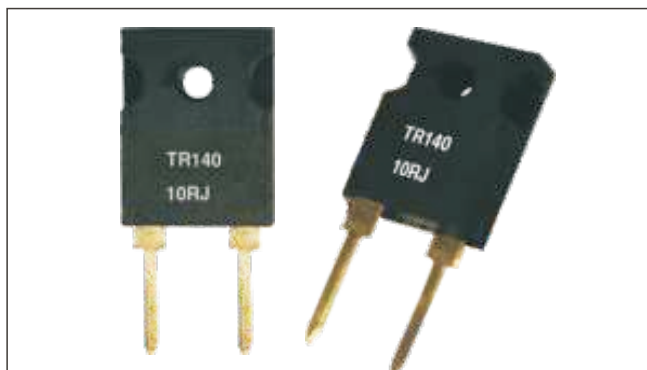
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本体颜色: Body Color
 标准品: Standard (Black 黑色)
 标示: Marking
 (根据客户要求提供相应标识)
 (According to the customer request to provide corresponding identification)

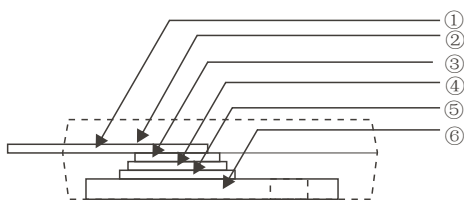
特性 Features

- I 采用厚膜, 无感设计, TO-247标注封装
- I Using thick film, Non-inductive, TO-247 Standard package
- II 额定功率: 140W (在底板中心温度 $\leq 25^{\circ}\text{C}$ 时)
- II Rating power 140W (the temp of floor center less than 25°C)
- III 电阻范围: 0.5Ω — $2.2\text{K}\Omega$
- III Resistance range: from 0.5Ω to $2.2\text{K}\Omega$
- IV 公差: $\pm 10\%$ 、 $\pm 5\%$
- IV Tolerance: $\pm 10\%$ 、 $\pm 5\%$
- V 工作温度范围: -55°C — 155°C
- V The range of working temperature: -55°C — 155°C
- VI 温度系数: $\pm 50\text{PPM}/^{\circ}\text{C}$ 、 $\pm 100\text{PPM}/^{\circ}\text{C}$ 、 $\pm 250\text{PPM}/^{\circ}\text{C}$
- VI TCR: $\pm 50\text{PPM}/^{\circ}\text{C}$ 、 $\pm 100\text{PPM}/^{\circ}\text{C}$ 、 $\pm 250\text{PPM}/^{\circ}\text{C}$
- VII 最大工作电压: 700V
- VII The max working voltage: 700V
- VIII 绝缘层耐压: 2500V
- VIII Withstand voltage in insulating layer: 2500V
- IX 绝缘电阻: 最小 $10000\text{M}\Omega$
- IX Dielectric resistance: Min $10000\text{M}\Omega$

应用范围 Applications

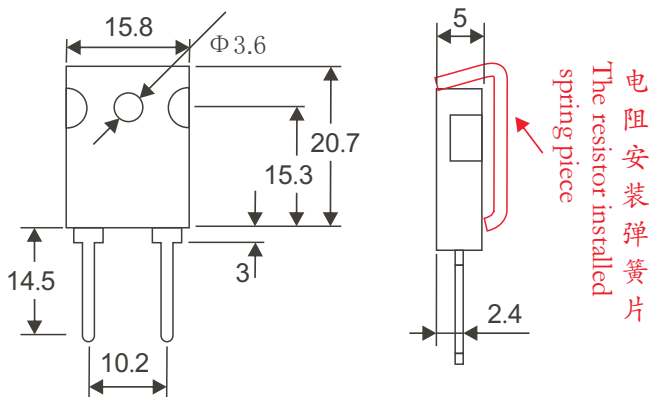
风力发电、电力传输、机器人、变频器、开关电源等领域
 Wind power generation, power transmission, robot, frequency converter, switching power supply and so on.

结构图 Construction



| | | |
|---|----------------|-----------------------|
| ① | 镀锡铜线 | Leads, Tin plated Cu |
| ② | 环氧树脂, UL94-V0 | Mold, epoxy, UL94-V0 |
| ③ | 铜导体 | Conductor, Cu |
| ④ | 电阻, NiCr 或 RuO | Resistor, NiCr or RuO |
| ⑤ | 氧化铝陶瓷基板 | Substrate, Alumina |
| ⑥ | 法兰 | Flange, Ni plated Cu |

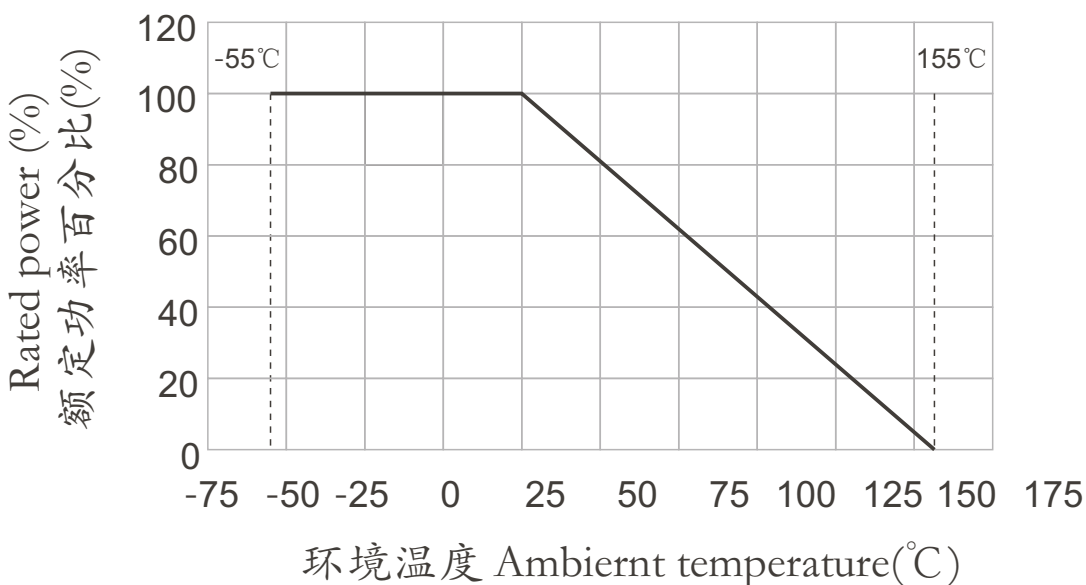
尺寸 Dimensions



参考规格 Reference Standards

JIS C 5201-1

降功耗曲线图 Derating Curve



性能 Performance

| 试验项目 Test item | 规格值 Performance requirements | 测试方法 Test methods(JIS C 5201-1) |
|---------------------------|--|---|
| 短时间过载 Short time overload | $\Delta R \leq \pm (0.5\% R_0 + 0.05\Omega)$ | 1.5倍额定功率, 10S($U_{max} \leq U_L = 700V$) 1.5 times rated power, 10S($U_{max} \leq U_L = 700V$) |
| 温度循环 Temp cycle | $\Delta R \leq \pm (0.5\% R_0 + 0.05\Omega)$ | -55°C, 30min/125°C, 30min, 5个周期 -55°C, 30min/125°C, 30min, 5period |
| 寿命 Load life | $\Delta R \leq \pm (1\% R_0 + 0.05\Omega)$ | 额定功率1000h, 底板中心温度 < 25°C Rated power 1000h, the temp of floor center < 25°C |
| 稳态湿热 Damp heat | $\Delta R \leq \pm (1\% R_0 + 0.05\Omega)$ | 40°C, RH93±3%, 56天 40°C, RH93±3%, 56days |

料号编号 Ordering Information

例 example

| | | | | |
|---------|----------|-----------------|--------------------------------------|---|
| TR | 140 | J | 100K0 | C |
| 型号 Type | 功率 Power | 精度 Tolerance | 阻值 Resistance | 温度系数 TCR |
| TR | 140=140W | J=±5% K=±10% | 0R500=0.5Ω 10R00=10Ω 1K000=1KΩ | C=±50PPM/°C A=±100PPM/°C H=±250PPM/°C |