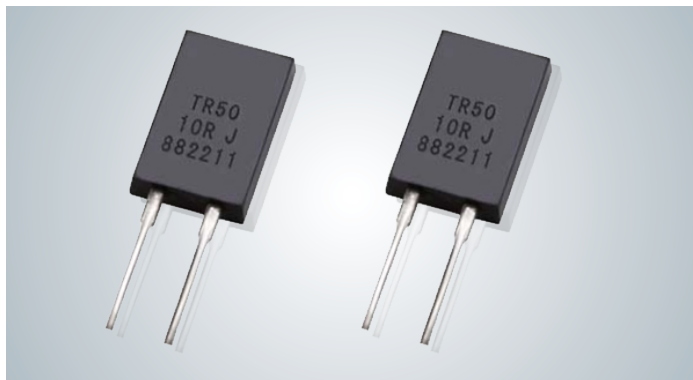


# TR 50 功率厚膜电阻 TR Power Thick Film Resistors



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)

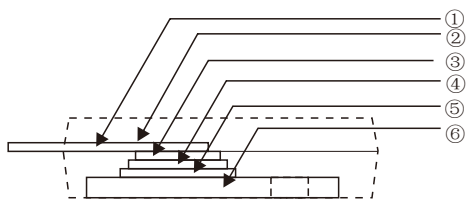
## ● 特性 Feature

- I 0.5%精度, 无感设计。  
0.5% Tolerance, Non inductance design
- II 大功率, 阻值范围宽。  
High power, wide resistance value
- III 方便安装。Easy mounting

## ● 应用范围 Applications

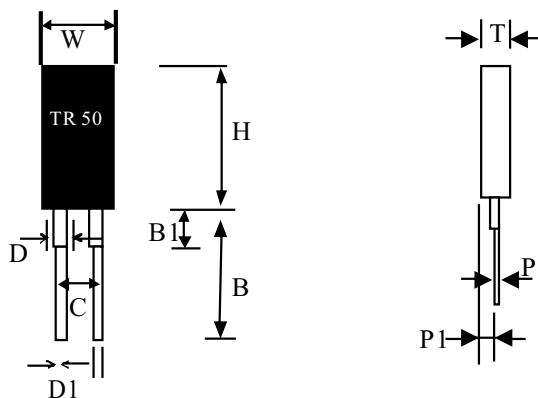
- I 仪器仪表 Meters and instruments
- II 各种电子设备 All kinds of electrical devices

## ● 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



| 型号<br>Type | 功率<br>Power | 尺寸 Dimensions (mm) |              |            |            |            |            |            |             |            |             |
|------------|-------------|--------------------|--------------|------------|------------|------------|------------|------------|-------------|------------|-------------|
| TR 50      | 50W         | W                  | H            | B          | B1         | C          | D          | D1         | T           | P          | P1          |
|            |             | 10.44 ± 0.24       | 16.25 ± 0.25 | 12.7 ± 1.3 | 3.3 ± 0.76 | 5.08 ± 0.3 | 1.27 ± 0.3 | 0.76 ± 0.1 | 3.18 ± 0.26 | 0.55 ± 0.1 | 1.78 ± 0.26 |

## ● 参考规格 Reference Standards

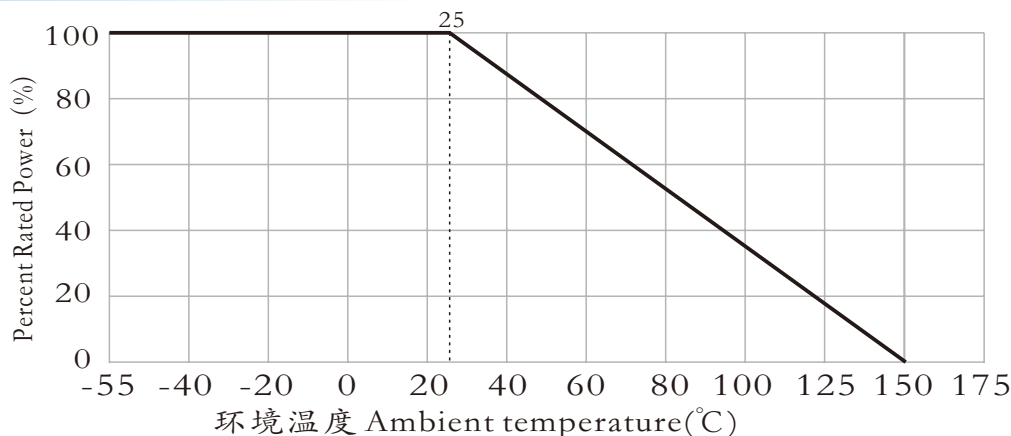
JIS C 5201-1

# TR 50 功率厚膜电阻 TR Power Thick Film Resistors

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

| 规格<br>Type | 功率(W)<br>Power<br>(25℃) | 热阻 (°C/W)<br>Thermal<br>resistance | 阻值范围<br>Resistance<br>Range<br>(Ω) | 精度<br>Tolerance   | 温度系数<br>T.C.R | 最高使用电压<br>Max working<br>Voltage | 气候类别<br>Climatic<br>category |
|------------|-------------------------|------------------------------------|------------------------------------|-------------------|---------------|----------------------------------|------------------------------|
| TR 50      | 50                      | 6.5                                | 0.1~1MΩ                            | ±0.5%<br>±1%, ±5% | ±250ppm/°C    | 500V                             | 55/125/56                    |

## ● 降功耗曲线图 Derating Curve



## ● 性能 Performance

| 试验项目<br>Test Items                 | 规格值<br>Performance Requirements            | 试验方法<br>Test Methods(JIS C 5201-1)                            |
|------------------------------------|--------------------------------------------|---------------------------------------------------------------|
| 短时间过负荷<br>Short time overload      | $\Delta R \leq \pm (0.25\%R + 0.05\Omega)$ | 2.5V <sub>R</sub> , 5s                                        |
| 快速温度变化<br>Rapid temperature change | $\Delta R \leq \pm (0.25\%R + 0.05\Omega)$ | -55℃, 30min / 125℃, 30min 5cycles                             |
| 寿命<br>Load life                    | $\Delta R \leq \pm (1\%R + 0.05\Omega)$    | 15℃ ~ 35℃, P <sub>R</sub> , 1000h                             |
| 稳态湿热<br>Humidity(steady states)    | $\Delta R \leq \pm (1\%R + 0.05\Omega)$    | 40℃, RH93±3%, 56d                                             |
| 气候顺序<br>Temperature cycling        | $\Delta R \leq \pm (1\%R + 0.05\Omega)$    | 125℃, 16h / 55℃, RH93±3%, 24h / -55℃, 2h / 15~35℃, 8.5KPa, 1h |

## ● 料号编号 ordering Information

例 example

|            |                     |                     |                       |                              |                   |
|------------|---------------------|---------------------|-----------------------|------------------------------|-------------------|
| TR         | 50                  | 0.5%                | 10R0                  | ±50ppm                       | 盒装                |
| 型号<br>Type | 额定功率<br>Rated Power | 误差值<br>Tolerance    | 电阻值 (Ω)<br>Resistance | 温度系数<br>TCR                  | 包装方式<br>Packaging |
|            | 50: 50W             | ±0.5%<br>±1%<br>±5% | 10R0=10Ω              | ±50ppm<br>±100ppm<br>±250ppm | 盒装<br>Box         |

包装说明：包装塑料自封袋包装起订量100只）。

Packaging : Plastic recloseable bags (moq : 100PCS)