

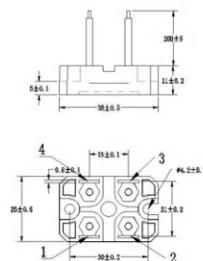
RHP150-B 型功率型厚膜电阻器

RHP150-B power type thick film resistor

产品特点 (Product Feature)

- 0.5%精度
- 大功率
- 无感设计
- 阻值范围宽
- 安装方便
- 同一封装可有 3 个不同阻值电阻
- 四个引出端子
- 0.5% Tolerance available
- High power rating
- Non inductive
- Wide ohmic value range
- Easy mounting
- 3 Different resistors in 1 module available
- 4 Terminals available

产品尺寸图 (Product Size)



技术参数 (SPECIAL FEATURES)

型号 TYPE	RHP150-B		
阻值范围 Resistance value range	0.1Ω~1Ω	1Ω~10Ω	10Ω~1MΩ
精度 Tolerance	±5%;±10%	±5%;±10%	±1%;±5%
温度系数 TCR	±500ppm/°C	±250ppm/°C	±50ppm/°C; ±100ppm/°C
最大工作电压 Max. working voltage	1500V		
绝缘层耐压 Dielectric strength	5000VDC		
温度范围 Temperature range	-55°C~155°C		
局部放电 Partial Discharge	2KVAC < 10pc		

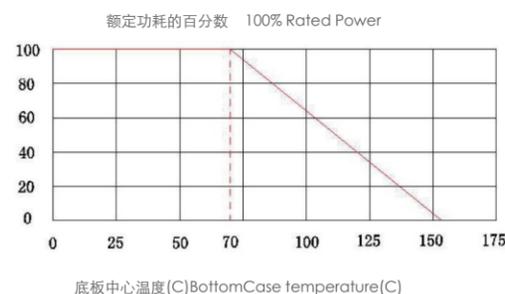
特征参数 (PERFORMANCE)

试验项目 TEST ITEM	性能要求 SPECIFICATIONS	试验方法 TEST METHOD GB/T5729-03 IEC115-1
短时间过负荷 Short time overload	1.5 倍额定功率, 10 秒 1.5 times rated power 10s $\Delta R \leq \pm (0.25\%R + 0.05\Omega)$	4.13
快速温度变化 Rapid temperature change	$\Delta R \leq \pm (0.25\%R + 0.05\Omega)$	4.19
寿命 Load life	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.25.2
稳态湿热 Humidity (steady states)	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.24
气候顺序 Temperature cycling	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.23

更高参数可协商供货。
所示功率需加装散热器，在无散热器的情况下功率为 3.5W。

Special specifications can be supplied in consultation with customers.
The condition of the above power is needed to mount a heatsink for they has no heatsinks, the power only be 3.5W

降功耗曲线 (POWER DERATING CURVE)



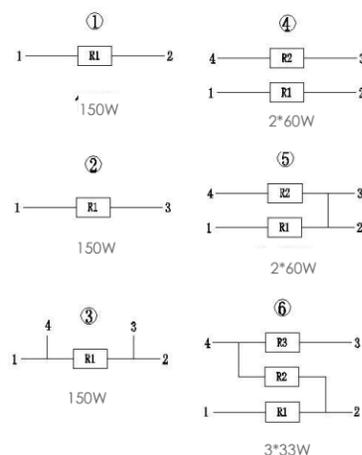
说明：当温度 ≤ 70℃ 时，可以满功率使用，当温度 > 70℃ 时，如曲线图所示，可以达到的功率逐渐变小，当温度在 155℃ 时，功率为 0。为提高导热率，电阻与散热器表面应涂抹导热硅脂，基板使用 M4 螺丝最大扭矩 1.3Nm，RHP150 引出端使用 M4 螺丝最大扭矩 1Nm。

Note: when the temperature is ≤ 70 °C, it can be used at full power. When the temperature is > 70 °C, as shown in the curve, the power that can be achieved gradually decreases. When the temperature is 155 °C, the power is 0. In order to improve the thermal conductivity, the surface of the resistance and radiator should be coated with thermal conductive silicone grease. The maximum torque of M4 screw for the base plate is 1.3nm, and the maximum torque of M4 screw for rhp150 outlet is 1nm.

成品识别码 (Product Identification Code)

RHP	-	150W	-	10R	-	J
厚膜电阻器 Thick film resistor		额定功率 Rated Power		电阻阻值 Resistance Value		阻值误差 Resistance Tolerance H=±3% J=±5% K=±10%

内部电路图 (ELECTRICAL DIAGRAM)



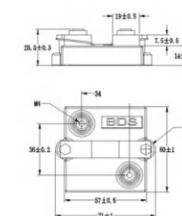
RHP250 型功率型厚膜电阻器

HIGH POWER THICK FILM RESISTORS

产品特点 (Product Feature)

- 无感设计,阻值范围宽
- 大功率
- 耐高压 6KV
- 引出端安装 M4 螺钉最大扭矩: 2Nm
- 散热片安装 M6 螺钉最大扭矩: 3Nm
- 电感 < 80nH
- Non-inductive, wide resistance range
- High power
- High voltage withstanding 6KV
- Contact terminal :M4 screw, Max. torque 2Nm
- Resistor inatallation :M6 screw, Max. torque 3Nm
- Inductance < 80nH

产品尺寸图 (Product Size)



应用领域 (Apply Field)

- 电源控制设备
- 马达控制
- 变频驱动, 变频
- 机器人系统
- Voltage power supply control equipment
- Motor controlling
- Shift drive, Frequency Converter
- Robot system

特征参数 (PERFORMANCE)

试验项目 TEST ITEM	性能要求 SPECIFICATIONS	试验方法 TEST METHOD GB/T5729-03 IEC115-1
短时间过负荷 Short time overload	1.5 倍额定功率, 10 秒 1.5 times rated power 10s $\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.13
快速温度变化 Rapid temperature change	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.19
气候顺序 Temperature cycling	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.23
稳态湿热 Humidity (steady states)	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.24
寿命 Load life	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.25.2

降功耗曲线 (POWER DERATING CURVE)



技术参数 (SPECIAL FEATURES)

型号 Model	85℃ 额定功率 Power Rating at 85°C	阻值范围 Resistance Range(Ω)	电阻温度系数 TCR (ppm/°C)	阻值精度 Resistance Tolerance(%)	最大工作电压 Max.work Voltage(V)	工作温度 Work Temperature
RHP	250W	R < 1Ω	±500	±10%	5KV	-55°C~+155°C
		1Ω < R < 10	±300	±5%		
		R > 10Ω	±150	±5%		

成品识别码 (Product Identification Code)

RHP	-	250W	-	10R	-	J
厚膜电阻器 Thick film resistor		额定功率 Rated Power		电阻阻值 Resistance Value		阻值误差 Resistance Tolerance H=±3% J=±5% K=±10%



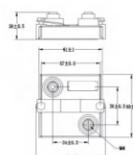
RHP600 型功率型厚膜电阻器

RHP600 power type thick film resistor

产品特点 (Product Feature)

- 无感设计,阻值范围宽 · Non-inductive,winde resistance range
- 大功率 · High power
- 耐高压 6KV · High voltage withstanding 6KV
- 引出端安装 M4 螺钉最大扭矩: 2Nm · Contact terminal :M4 screw,Max.torque 2Nm
- 散热片安装 M4 螺钉最大扭矩: 2Nm · Resistor inatallation :M4 screw,Max.torque 2Nm
- 电感<80nH · Inductance<80nH

产品尺寸图 (Product Size)



特征参数 (PERFORMANCE)

试验项目 TEST ITEM	性能要求 SPECIFICATIONS	试验方法 TEST METHOD GB/T5729-03 IEC115-1
短时间过载 Short time overload	1.5 倍额定功率, 10 秒 1.5 times rated power 10s $\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.13
快速温度变化 Rapid temper ature change	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.19
气候顺序 Temperature cycling	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.23
稳态湿热 Humidity (steady states)	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	4.24
寿命 Load life	$\Delta R \leq \pm (1\%R + 0.05\Omega)$	4.25.2

降功耗曲线 (POWER DERATING CURVE)



技术参数 (SPECIAL FEATURES)

型号 Model	85°C额定功率 Power Rating at 85°C	阻值范围 Resistance Range(Ω)	电阻温度系数 TCR (ppm/°C)	阻值精度 Resistance Tolerance(%)	最大工作电压 Max.work Voltage(V)	工作温度 Work Temperature	工作温度 Work Temperature
RHP	600W	1Ω<R≤10 R>10Ω	±300 ±150	±5% ±5%	5KV	-55°C~+155°C	4000VDC<10pc

成品识别码 (Product Identification Code)

RHP	600W	10R	J
厚膜电阻器 Thick film resistor	额定功率 Rated Power	电阻阻值 Resistance Value	阻值误差 Resistance Tolerance H=±3% J=±5% K=±10%

RTH系列不锈钢厚膜电阻器

stainless steel thick film resistor

产品概述 (Product Introduction)

RTH系列不锈钢厚膜电阻器, 具有高功率承受能力和较高的电阻值。它在电路中具有广泛的应用, 常用于电阻匹配、电流测量、温度测量等。在实际应用中, 如果能正确选用和合理使用厚膜电阻器, 可以有效提高电路的性能和稳定性。

Rth series stainless steel thick film resistor has high power bearing capacity and high resistance value. It has a wide range of applications in the circuit, commonly used in resistance matching, current measurement, temperature measurement and so on. In practical application, if the thick film resistor can be correctly selected and reasonably used, the performance and stability of the circuit can be effectively improved.

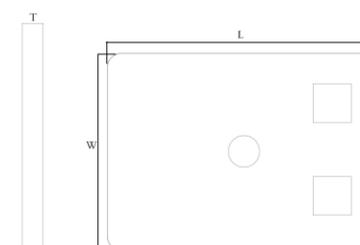
技术参数 (SPECIAL FEATURES)

RTH 系列	阻值范围 Resistance range	精度	功率 (0.53°C/W散热器)	功率 W(0.53°C/W散热器+5m/s 风冷)	脉冲功率	耐电压
RTH160			RTH160	RTH160	RTH160	RTH160
RTH180			RTH180	RTH180	RTH180	RTH180
RTH200			RTH200	RTH200	RTH200	RTH200
RTH260	10R~200R	10%	RTH260	RTH260	RTH260	2500VDC
RTH270			RTH270	RTH270	RTH270	RTH270
RTH280			RTH280	RTH280	RTH280	RTH280

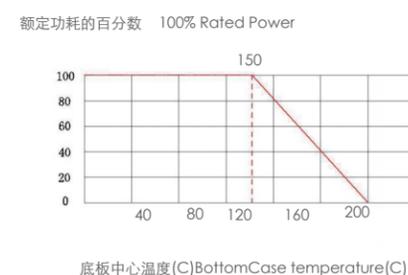


产品尺寸图 (Product Size)

RTH 系列	L±0.1	D±0.1	T±0.1	øD
RTH160	31.9	28.1	0.9	2.2
RTH180	49.3	35.9	0.9	3.2
RTH200	61	40.6	0.9	5.3
RTH260	101.6	70	0.9	5.3
RTH270	122	70	1.5	5.3
RTH280	RTH280	RTH280	RTH280	RTH280



降功耗曲线 (POWER DERATING CURVE)



说明:当温度≤150°C时, 可以满功率使用, 当温度>150°C时, 如曲线图所示, 可以达到的功率逐渐变小, 当温度在 200°C时, 功率为0。为提高导热率, 电阻与散热器表面应涂导热硅脂, 基板使用M3 螺丝最大扭矩 2.5Nm。

Note: when the temperature is ≤ 150 °C, it can be used at full power. When the temperature is >150 °C, as shown in the curve, the power that can be achieved gradually decreases. When the temperature is 200 °C, the power is 0. In order to improve the thermal conductivity, the surface of the resistance and radiator should be coated with thermal conductive silicone grease, and the maximum torque of M3 screw for the substrate is 2.5nm.

成品识别码 (Product Identification Code)

RTH	160W	10R	J
厚膜电阻器 Thick film resistor	额定功率 Rated Power	电阻阻值 Resistance Value	阻值误差 Resistance Tolerance H=±3% J=±5% K=±10%

执行标准 (Applicable Standards)

- 1.GB/T 5729-2003
- 2.GB 5732-85
- 3.GB/T 2828.1-2003