

平面厚膜大功率无感电阻器

Thick Film Resistor

产品简述 (Product Profile)

RPTF 平面厚膜大功率无感电阻器,高频无感, 长时使用需要水冷或者风冷, 功率范围100W~800W, 长时间运行底板中心温度≤85℃。应用于发电、电力传输、变速驱动等电工设备领域。

RPTF planar thick film and high-power non-inductive resistors are of high frequency and non-inductive. Water-cooling or air-cooling is needed during long-time operation,which keeps the substrate center temperature not more than 85 ℃. Power range is 100 w ~ 800 w. They are applied to electrical equipment of power generation, power transmission, variable speed drive, etc.



基本电气参数 (Product Electric Parameters)

阻值范围Ω Resistance range Ω	额定功率 P85℃ W Rated power P85℃	最大工作电压 V Max. operating voltage V	阻值误差 ±% Tolerance ±%	温漂 ±ppm/℃ Temperature coefficient
0.3Ω to 100K	100W to 800W	5K	3,5,10	100; 200; 300

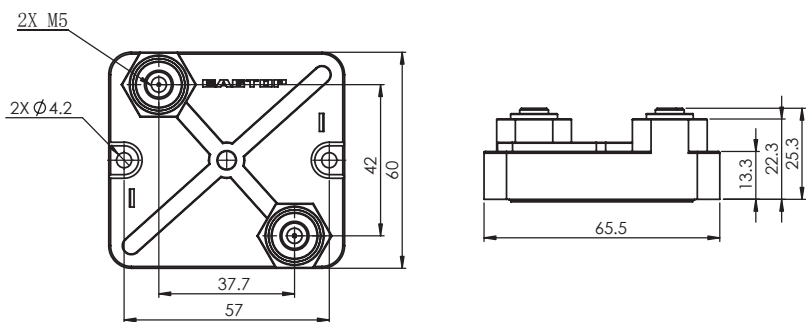
适用标准 (Applicable Standards)

GB/T5729-2003 电子设备用固定电阻器 Fixed resistors used in electronic equipment
IEC60115
MIL-STD-202C

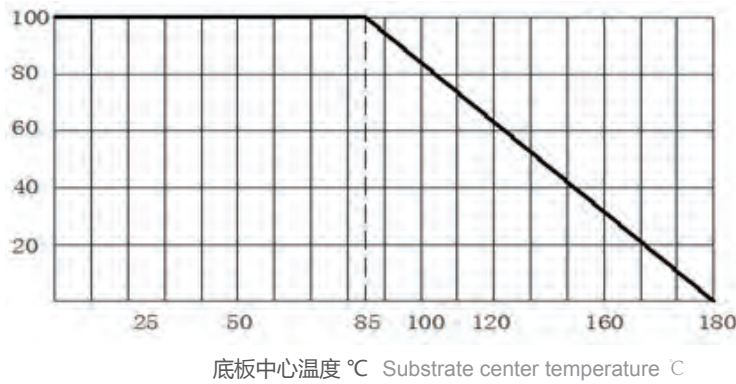
机械规范 Mechanical Specifications

材料：UL 94V0	Material: UL 94V0
基板：氮化铝	Substrate: Aluminum nitride
接线螺钉：M5	End connections:M5
引出线安装：2 Nm	Tighening torque connections:2 Nm
电阻安装：1.8 Nm	Resistance installation torque:1.8 Nm
重量：83g ±10%	Weight:83g ±10%

产品尺寸图 (Product Size)



降功率曲线 (Derating Curve)



性能 (Performance)

特性 Property	检查方法 Inspection method	性能要求 Performance requirements
稳态湿热 Constant humidity-heat	56天/40℃ 相对湿度≥95% 56 days RH95%/40 °C	$\Delta R \leq \pm(0.5\%R + 0.005\Omega)$
温度快速变化 Temperature change	-55℃ /+125℃(各0.5h) 5次周期 -55 °C /+125 °C, 5cycles	$\Delta R \leq \pm(0.5\%R + 0.005\Omega)$
短时过负荷 Transient overload	1000W 10S@70℃	$\Delta R \leq \pm(0.25\%R + 0.005\Omega)$
绝缘电阻 Insulation resistance	DC 1000V	$R \geq 10G\Omega$
耐电压 Voltage resistibility	AC7000V 50Hz 1min	无击穿或飞弧 Free of breakage or flying arc
负荷寿命 Life	额定功率1000h,底板温度85℃ 1000h/Pr at 85 °C	$\Delta R \leq \pm(0.5\%R + 0.005\Omega)$
高频振动 Vibration resistibility	MIL-STD-202, 方法204, 条件D MIL STD202 method 204 cond.D(10g;5/500Hz)	$\Delta R \leq \pm(0.25\%R + 0.005\Omega)$

成品识别 (Product Identification Code)

RPTF	0600	6K00	9999G	K	J
产品类别 Product type	功率 Rated power 50W-800W 0020-50W	电阻阻值 Resistance value(ohm) (Ω)indicates resistance value in units of ohms 0R08-0.08Ω/ 0032-32Ω/8K00-8KΩ	产品特征 Product features	电阻阻值误差 Resistance tolerance H=±3% K=±10% J=±5%	接线 Connection G=端子Terminal

RPTF.0600.6K00.9999G(“9999G”表示常规品,此款产品为常规品600W/6K R 厚膜电阻器
9999G means standard product, 2kW/32R Thick Film Resistor)
RPTF.2K00.0032.6218A(“6218A”表示客户代码,此款产品为客户定制的2kW/32 R 厚膜电阻器
6218A means customer code, customer non-standard product 2kW/32R Thick Film Resistor)