

HPR 被漆功率瓷管电阻器 Coated High Power Ceramic Tube Resistors



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

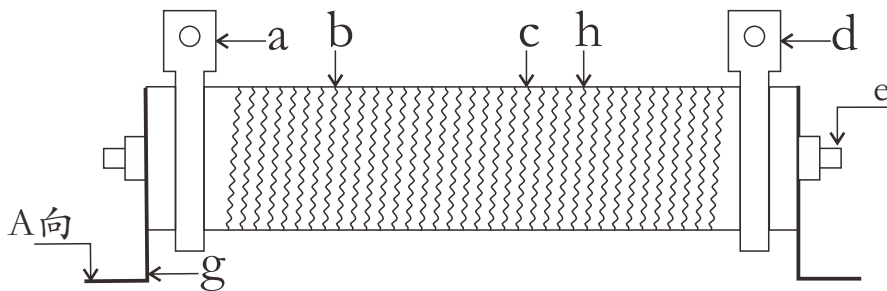
● 特性 Feature

- I 过负荷能力强, 热稳定性好, 使用寿命长、耐高压。: Good overload and heat durability capacity, the useful time is longer than the others, withstand high voltage.
- II 精度范围: $\pm 5\%$ 、 $\pm 10\%$: Resistance tolerance: $\pm 5\%$ 、 $\pm 10\%$

● 应用范围 Applications

- I 主要用于大型电源: Mostly used in large power supply
- II 电力设备: Electricity equipment
- III 电器设备: Electrical equipment
- IV 机车等等: Locomotive

● 结构图 Construction



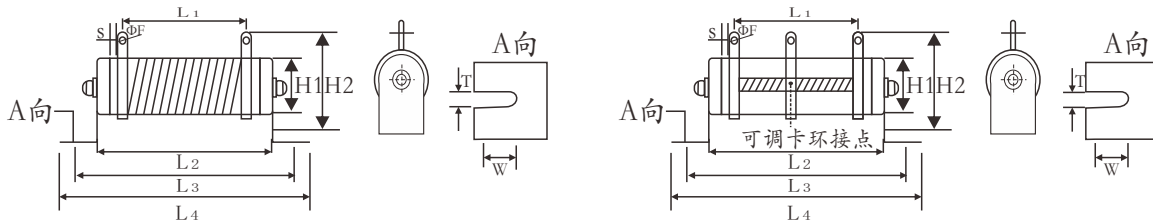
ad	b	c	e	g	h
接线端子	环氧树脂绝缘层	合金丝	螺杆	镀锌支架	高铝瓷管
Terminal block	Epoxy resin insulating layer	Alloy wire	Metal screw	Zinc plating support	Alumina porcelain

● 参考规格 Reference Standards

JIS C 5201-1

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规格尺寸 Specifications and Dimensions



规格 Type	功率 Power (W)	外形尺寸 Dimensions (mm)									
		I1 ± 2	L2 ± 3	L3 ± 3	L4 ± 4	H1 ± 1	H2 ± 1	S ± 0.5	F ± 0.5	W ± 1	T ± 0.5
HPR25B	25	40	60	75	100	20	50	5.0	3.5	13.0	5.0
HPR50B	50	82	100	114	140	30	58	6.0	5.0	14.0	6.0
HPR100	100	132	150	174	200	30	58	6.0	5.0	14.0	6.0
HPR150	150	162	180	194	220	30	58	6.0	5.0	14.0	6.0
HPR200	200	207	225	240	265	30	58	6.0	5.0	14.0	6.0
HPR250	250	292	310	324	350	30	58	6.0	5.0/6.0	14.0	6.0
HPR300	300	258	270	285	328	41	85	7.8	6.0	23.0	6.0
HPR400	400	322	344	360	406	41	85	7.8	6.0	23.0	6.0
HPR500	500	322	344	355	406	51	95	7.8	6.0	26.0	8.5
HPRA00	1000	290	315	325	375	71	110	10.0	8.0	32.0	8.5
HPRA50	1500	405	420	435	505	71	110	10.0	8.0	32.0	8.5
HPRB00	2000	495	525	540	610	71	110	10.0	8.0	32.0	8.5

备注:具体规格尺寸可以根据客户的需求制作,同时也可以制作一管多个阻值,也可按客户要求取消固定支架。
 Note: We can according customer requirements to customize the specification and dimension, also can product multiple resistance value of one ceramic tube or cancel the fixed plank.

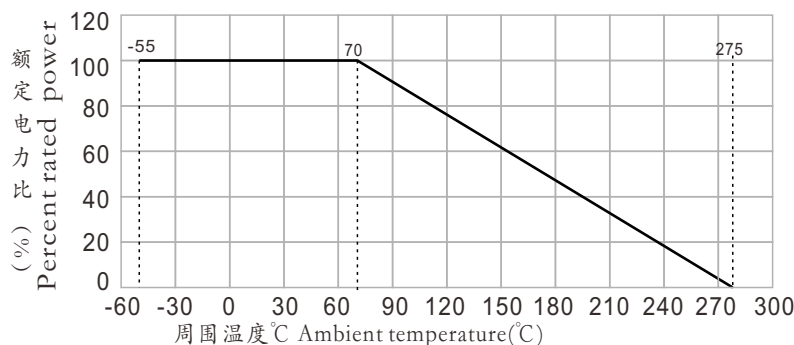
功率、阻值范围与耐电压 Power And Resistance etc

规格 Type	功率 Power (W)	阻值范围 Resistance Range (Ω)	误差值 Tolerance	温度系数 T.C.R PPM/°C	环境温度 Operating ambient temperature
HPR25B	25	0R22~4K7	± 5% ± 10%	± 350 PPM/°C	-55°C ~ +275°C
HPR50B	50	0R22~10K			
HPR100	100	0R22~15K			
HPR150	150	0R33~18K			
HPR200	200	0R33~22K			
HPR250	250	0R36~24K			
HPR300	300	0R33~27K			
HPR400	400	0R33~30K			
HPR500	500	0R33~33K			
HPRA00	1000	0R33~36K			
HPRA50	1500	0R33~39K			
HPRB00	2000	0R33~43K			

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● 额定温度下降曲线图 Derating Curve

例 Example



● 性能 Performance

试验项目 Test Items	性能 Performance	试验方法 Test Methods(JIS C 5201-1)
温度系数 Temperature coefficient	$\pm 350\text{ppm}/^\circ\text{C}$	在常温及常温+100°C时分别测量电阻并计算每度的阻值变化率。 Test resistance value at normal temperature and normal temperature added 100°C, calculate $^\circ\text{C}$ resistance value change rate.
短时间负荷 Short-time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	施加10倍额定功率或最高负荷电压(取较小者)5秒。 According 10 times rated power to account the power or max. overload voltage(get the lower) for 5seconds.
耐焊接热 Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在 $350 \pm 10^\circ\text{C}$ 的锡炉中浸入2~3秒。 Immerge into the $350 \pm 10^\circ\text{C}$ tin stove for 2~3 seconds
可焊性 Solderability	焊锡面积覆盖率95%以上 Tth soldering area is over 98%	在 $245 \pm 3^\circ\text{C}$ 的锡炉中浸入2~3秒。 Immerge into the $245 \pm 3^\circ\text{C}$ tin stove for 2~3 seconds
温度循环 Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在-55°C时放置30分钟,然后在+25°C时放置10~15分钟,然后再在+155°C时放置30分钟,然后再在25°C时放置10~15分钟,共循环5次。At-55°C for 30min, then at +25°C for 10~15min, then at +155°C for 30min, then at +25°C for 10~15min, total 5cycles.
耐湿负荷寿命 Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	在温度为 $40 \pm 2^\circ\text{C}$,相对湿度为90~95%的恒温恒湿箱中,施加额定电压或最大工作电压(取较小者)共1000小时(通1.5小时,断0.5小时)。Overload rated voltage or Max.working voltage(get the lower) for 1000hours(1.5hours on and half-hour off) at the $40 \pm 2^\circ\text{C}$ and 90~95% relative humidity.
耐温负荷寿命 Load life in heat	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	在 $70 \pm 2^\circ\text{C}$ 恒温恒湿箱中施加额定电压或最大工作电压(取较小者)共1000小时(通1.5小时,断0.5小时)。Overload rated voltage or Max.working voltage(get the lower) for 1000hours(1.5hours on and half-hour off) at the $70 \pm 2^\circ\text{C}$.
难燃性 Nonflammability	不可有明显火焰 No visible flame	分别按5、10、16倍额定功率加交流负荷5分钟。 Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.

● 料号编号 Ordering Information

例 example

HPR	50B	J	10R00	O	D002
产品名称 Product Name	功率Power	精度 Tol	阻值Ohm	特殊码 Special code	图纸号 Drawing No
被漆功率瓷管电阻器 Coated High Power Ceramic Tube Resistor	25B=25W 50B=50W 100=100W 500=500W A00=1000W A50=1500W B00=2000W	J=±5% K=±10%	0R100=0.1Ω 0R200=0.22Ω 10R00=10Ω 10K00=10KΩ		