

# PHG 被漆功率瓷管电阻器 Painted High Power Ceramic Tube Resistors



本体颜色: Body Color

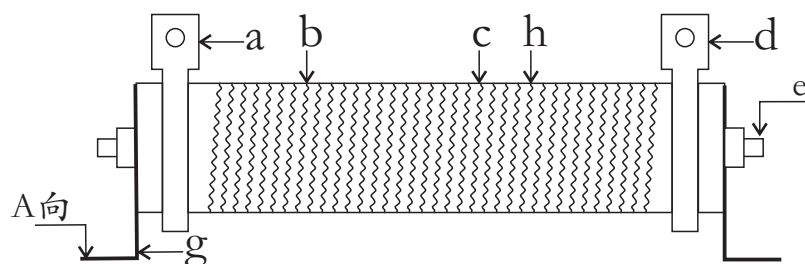
标准品: Standard (Green 绿色)

标示: Marking

(根据客户要求提供相应标识)

(According to the customer request to provide corresponding identification)

## ● 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

## ● 特性 Feature

I 产品选择表面立式波纹, 有利于散热、减小寄生电感, 耐大电流冲击。

The product surface with solid wave type, which will help to reduce the stray inductance and withstand high current surge.

II 过负荷能力强, 热稳定性好, 使用寿命长。

Good overload and heat durability capacity, the useful time is longer than the others.

III 精度范围:  $\pm 5\%$ 、 $\pm 10\%$

Resistance tolerance:  $\pm 5\%$ 、 $\pm 10\%$

## ● 参考规格 Reference Standards

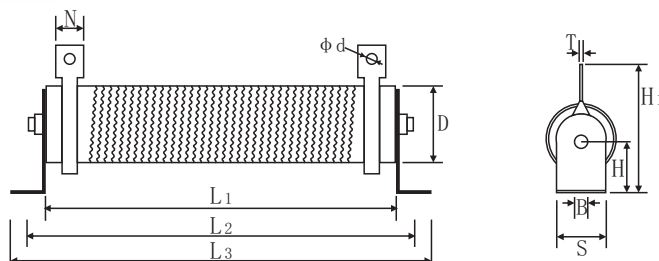
JIS C 5201-1

## ● 料号编号 ordering Information

例 example

PHG	300	J	10R00	A
产品名称 Product Name	功率 Power	精度 Tol	阻值 Ohm	特殊码 Special code
被漆功率瓷管电阻器 Painted High Power Ceramic Tube Resistors	10B=10W 50B=50W 100=100W 300=300W	J= $\pm 5\%$ K= $\pm 10\%$	0R100=0.1 $\Omega$ 0R200=0.22 $\Omega$ 10R00=10 $\Omega$ 10K00=10K $\Omega$	A1 不带支架 A1 Without brackets A2 带支架 A2 With brackets

## 规格尺寸 Specifications and Dimensions



规格 Type	功率 Power	外形尺寸 Dimensions (mm)										
		$L_1 \pm 2$	$L_2 \pm 5$	$L_3 \pm 3$	$D \pm 2$	$B \pm 1$	$H \pm 1$	$H_1 \pm 3$	$S \pm 2$	$N \pm 2$	$\phi d \pm 1$	$T \pm 0.5$
PHG	20W	62	84	100	20	5	25	34	20	6	3.5	1.0
PHG	30W	82	104	120	20	5	25	50	20	6	3.5	1.0
PHG	50W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
PHG	60W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
PHG	80W	152	174	196	28	6.5	28	68	28	8	4.5	1.5
PHG	100W	182	204	226	28	6.5	28	68	28	8	4.5	1.5
PHG	150W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
PHG	200W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
PHG	300W	285	304	345	40	6.5	40	85	40	10	5.5	2.0
PHG	400W	316	338	375	40	6.5	40	85	40	10	5.5	2.0
PHG	500W	318	338	378	50	6.5	45	100	50	10	6.0	2.0
PHG	600W	348	368	408	50	6.5	45	100	50	10	6.0	2.0
PHG	750W	303	330	368	60	8.5	58	115	60	12	6.0	2.0
PHG	1000WS	303	330	368	60	8.5	58	115	60	12	6.0	2.0
PHG	1000W	433	460	500	60	8.5	58	115	60	12	6.0	2.0
PHG	1200W	418	445	485	60	8.5	58	115	60	12	6.0	2.0
PHG	1500WS	418	445	485	60	8.5	58	115	60	12	6.0	2.0
PHG	1500W	433	460	500	70	8.5	65	125	70	15	6.0	2.0
PHG	1800W	513	540	580	60	8.5	60	119	60	12	6.0	2.0
PHG	2000W	435	457	500	80	6.5	78	157	80	15	6.5	2.0
PHG	2500WS	603	630	670	60	8.5	60	119	60	12	6.0	2.0
PHG	2500W	433	475	525	80	8.5	82	170	80	15	6.5	2.0
PHG	3000W	433	475	525	100	8.5	82	170	100	15	6.5	2.0
PHG	5000W	505	560	580	150	10	120	260	150	30	10.0	3.0
PHG	5400W	505	560	580	150	10	120	260	150	30	10.0	3.0
PHG	10000W	900	925	980	150	10	120	260	150	30	10.0	3.0

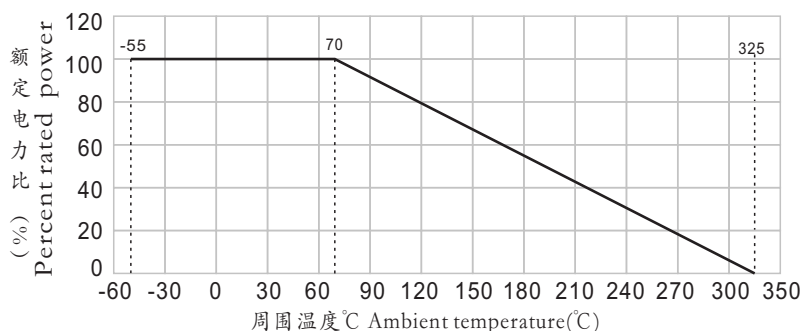
备注:具体规格尺寸可以根据客户的需求制作,同时也可以制作一管多个阻值,也可按客户要求取消固定支架。

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.

可协议生产2500W~15000W电阻。Our factory can also produce 2500W~15000W non-standard resistors according to the requirement

## 额定温度下降曲线图 Derating Curve

例 Example



## ● 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( $\Omega$ )	误差值 Tolerance	温度系数 T.C.R PPM/ $^{\circ}\text{C}$	最高使用电压 Max Working Voltage (V)	最高负荷电压 Max Overload Voltage (V)	使用温度范围 Operating Temp.Range
PHG	20W	0.1~100	J $\pm 5\%$ K $\pm 10\%$	$\pm 350$	$\sqrt{P \cdot R}$	$\sqrt{10P \cdot R}$	$-55^{\circ}\text{C} \sim 325^{\circ}\text{C}$
PHG	30W	0.1~100					
PHG	50W	0.15~100					
PHG	60W	0.15~100					
PHG	80W	0.2~100					
PHG	100W	0.3~100					
PHG	150W	0.36~200					
PHG	200W	0.43~200					
PHG	300W	0.43~200					
PHG	400W	0.43~300					
PHG	500W	0.5~300					
PHG	600W	0.5~300					
PHG	750W	0.5~500					
PHG	1000WS	0.5~500					
PHG	1000W	0.5~500					
PHG	1200W	0.5~500					
PHG	1500WS	0.5~500					
PHG	1500W	0.5~500					
PHG	1800W	0.5~500					
PHG	2000W	0.5~500					
PHG	2500WS	0.5~500					
PHG	2500W	0.5~1000					
PHG	3000W	0.5~1000					
PHG	5000W	0.5~1000					
PHG	5400W	0.5~1000					
PHG	10000W	0.5~1000					

## ● 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 $^{\circ}\text{C}$ 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 $^{\circ}\text{C}$ , 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 The 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	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	在-55 $^{\circ}\text{C}$ 时放置30分钟,然后在+25 $^{\circ}\text{C}$ 时放置10~15分钟,然后再在+155 $^{\circ}\text{C}$ 时放置30分钟,然后在25 $^{\circ}\text{C}$ 时放置10~15分钟,共循环5次。At-55 $^{\circ}\text{C}$ for 30min, then at +25 $^{\circ}\text{C}$ for 10~15min, then at +155 $^{\circ}\text{C}$ for 30min, then at +25 $^{\circ}\text{C}$ for 10~15 min, total 5cycles.
耐湿负荷寿命 Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.1\Omega)$	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 $\pm 2^{\circ}\text{C}$ .
不燃性 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.