



● RHV80 High voltage thick-film resistor
● RHV80 高压厚膜电阻器

一、INTRODUCTION 说明

■ Feature 特征:

This product adopts the ruthenium metal glaze made of silver palladium alloy electrode resistance, high resistance, small volume, light weight, good performance of high frequency, high temperature, moisture resistance, resistance to overload.

本产品采用钌系金属玻璃釉做电阻，银钯合金做电极，高电阻器体积小、重量轻、高频特性好、耐高温、耐湿、耐过负荷。

■ Application 应用:

Usually used in high voltage system: such as the high voltage inverter and high-voltage circuit, a voltage divider circuit and high voltage power electronic field. For environmental protection equipment, medical equipment, electrostatic dust removal equipment, electrical system, instrumentation; arc eliminating circuit capacitors, high voltage buffer circuit, pulse modulator imaging equipment of impulse voltage generator.

经常用在高压系统:如高压变频器及高压电路、电压分压器电路及高压电力电子领域。用于环保设备、医疗设备、静电除尘设备、电力系统、仪器仪表;电容器的消弧电路,高电压缓冲电路,脉冲调制器显像设备冲击电压发生器等。

二、DIMENSIONS 规格尺寸

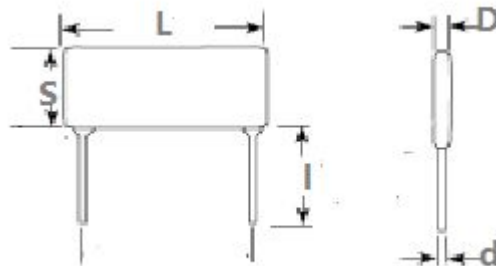


Table-1 (表-1)

Type 规格	power(W) 功率	Dimensions 尺寸(Unite 单位: mm)				
		Lmax	Smax	D	l	d
RHV80-0.25	0.25W	10	5	2.5	24	0.56
RHV80-0.25	0.25W	22	4	2.5	24	0.56
RHV80-0.25	0.25W	25	5	2.5	24	0.56
RHV80-0.5	0.5W	35	5	2.5	24	0.56
RHV80-0.5	0.5W	41	5	2.5	42	0.56
RHV80-1	1W	25	10	2.5	30	0.56
RHV80-1	1W	30	8	2.5	30	0.56
RHV80-1	1W	33	8	2.5	35	0.56
RHV80-2	2W	38	10	3	40	0.8
RHV80-2	2W	45	10	3	45	0.8
RHV80-2	2W	60	10	3	45	0.8
RHV80-3	3W	30	15	3	35	0.8
RHV80-4	4W	60	10	3	55	0.8
RHV80-5	5W	80	20	4	60	0.8
RHV80-10	10W	97	23	4	80	0.8

三、ELECTRICAL CHARACTERISTICS 电气特性

Table-2 (表-2)

Type 规格	power(W) 功率	Resistance range 阻值范围(Ω)	Tolerance 精度(%)	T.C.R((10-6 /°C) 温度系数	Working voltage 工作电压(KV)
RHV80-0.25	0.25W	100~10KM	F(±1%) G(±2%) J(±5%) K(±10%) M(±20%)	±100PPM ±200PPM ±300PPM	2
RHV80-0.25	0.25W	100~10KM			4
RHV80-0.25	0.25W	100~10KM			10
RHV80-0.5	0.5W	100~1KM			15
RHV80-0.5	0.5W	100~10KM			15
RHV80-1	1W	100~10KM			15
RHV80-1	1W	100~10KM			15
RHV80-1	1W	100~10KM			15
RHV80-2	2W	100~10KM			20
RHV80-2	2W	100~10KM			20
RHV80-2	2W	100~10KM			20
RHV80-3	3W	100~10KM			25
RHV80-4	4W	100~100KM			25
RHV80-5	5W	100~20KM			25
RHV80-10	10W	100~20KM			30

四、 RATED VOLTAGE OF RESISTOR 电阻额定电压计算方法

The DC or AC voltage calculated by the square root of the product of the rated resistance and the rating power.

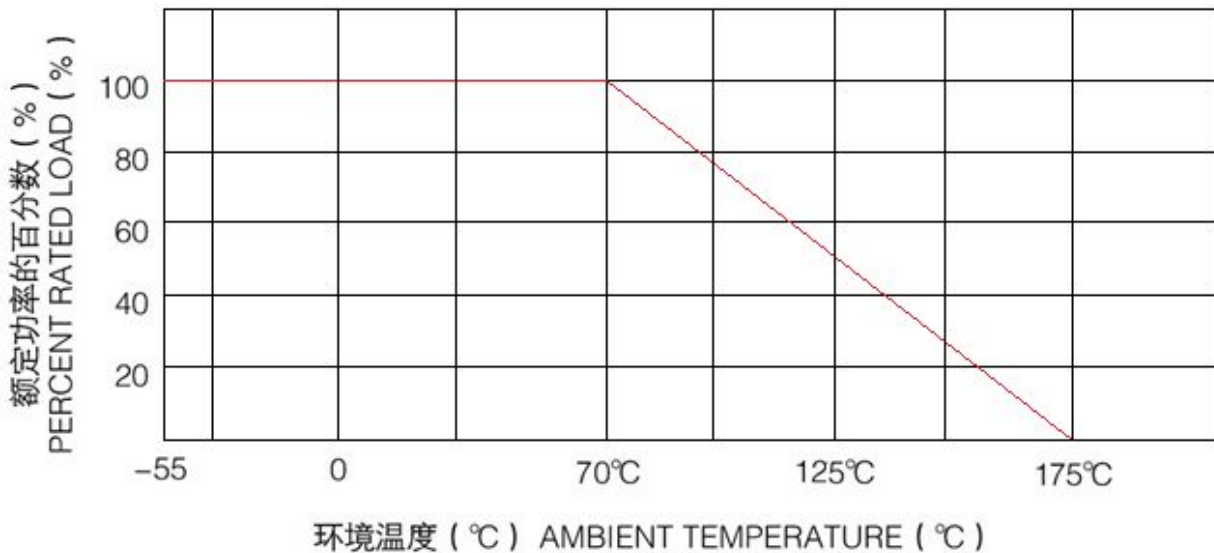
用标称阻值和额定功耗乘积的平方根计算直流或交流有效值电压。

$$E = \sqrt{PR}$$

E: Rated voltage (V) 额定电压
P: Power rating (W) 额定功率
R: Nominal resistance (Ω) 阻值

In no case shall the rated voltage be greater than the applicable maximum continuous working voltage. 在任何情况下可适用的最大连续工作电压均不得大于额定电压。

Power derating curve & Temperature application range 降功耗及电阻适用温度范围图



五、 MAIN TEST ITEM & SPECIFICATION AND TEST METHOD 主要检测项目方法及性能要求

Table-3 (表-3)

TEST ITEM 检测项目	TEST METHOD 检测方法	SPECIFICATION 性能要求
Solderability 可焊性	Terminal except 3mm shall be immersed in the solder. 浸入深度距端部 3mm Solder temperature 焊接温度: 230±5°C Immersion time 浸入时间: 15±0.5sec	Cover a minimum of 95% of the surface being immersed. 浸润面积最少达 95%以上
Resistance to soldering heat 耐焊接热	Terminal except 3mm shall be immersed in the solder. 浸入深度距端部 3mm Solder temperature 焊接温度 : 350±10°C Immersion time 浸入时间: 3.5±0.5sec	Change in resistance 阻值变化率 ΔR ≤ ± (0.2%R + 0.05 Ω)

Continue Table-3 (续表-3)

TEST ITEM 检测项目	TEST METHOD 检测方法	SPECIFICATION 性能要求
Temperature cycling 温度快速变化	-55℃~125℃ 5cycles 5次循环	Change in resistance 阻值变化率 $\Delta R \leq \pm (0.1\%R + 0.05 \Omega)$
Damp heat with load 稳态湿热	40±2℃; 90~95%RH ; 1000 ⁺⁴⁸ ₋₀ H	Change in resistance 阻值变化率 $\Delta R \leq \pm (1\%R + 0.1 \Omega)$ Appearance Without distinct damage 外观无损坏
Endurance at room temperature 室温耐久性	Room temperature 室温; DC Rated voltage. 直流额定电压; 1.5/0.5hr-ON/OFF; 1000 ⁺⁴⁸ ₋₀ H	Change in resistance 阻值变化率 $\Delta R \leq \pm (0.5\%R + 0.1 \Omega)$
Terminals Strength 引出端强度	Tensile 拉力 10N 30sec Bendin 弯曲 5N 2cycles Torsion 扭转 5cycles	Without distinct damage or looseness of terminals 没有异常损伤或引出端松动 $\Delta R \leq \pm (0.1\%R + 0.05 \Omega)$
Vibration 振动	Entire frequency range 振动频率范围: 10-55-10Hz/min Amplitude 1.5mm Each 3direction/2hrs 全振幅 1.5mm X.Y.Z 3方向 各2小时	Without mechanical damage 没有机械损伤 Change in resistance 阻值变化率 $\Delta R \leq \pm (0.1\%R + 0.05 \Omega)$
Short time Overload 短期过载	Applying voltage: 10 times rated Power 5sec. 施加的电压: 10倍额定功率 5秒	No visible damage 无可见损伤 $\Delta R \leq \pm (0.2\%R + 0.05 \Omega)$

六、 ORDER SAMPLE 订货示例

RHV80-4W-1MRJ : RHV80 10W 1MR J
 型号 功率 阻值 精度
 Type Power Resistance Resistance tolerance

Execution: 拟制:	Authorize: 批准:	Date: 日期:	Number: 编号:
南京步梯电子有限公司			BT-S2013-010