



HVR80A 无感厚膜高压电阻器

HVR80A Non Inductive Thick Film High Voltage Resistors

1、硅树脂封装和玻璃介质封装，可在空气、高压油、环氧树脂中使用，电阻误差值提供以下四种选择：±0.5%、±1%、±2%、±5%、±10%。

silicone packaging and glass media packaging, they can be used in air, high pressure oil, epoxy resin, resistance error value to provide the following four options: ±0.5%, ±1%, ±2%, ±5%, ±10%.

2、功率范围，0.5W~25W，具有耐高压、无感、耐脉冲、高稳定性、耐潮湿。引出端采用镀锡铜针。

power range, 0.5W~25W, with high pressure resistance, non-inductive, pulse resistance, high stability, moisture resistance. Leading-out terminal adopts tinned copper needle.

3、基体采用95%以上的高品质陶瓷(Al_2O_3)，电阻膜层采用贵金属银、钌、钯等成分浆料，经850°C高温烧结而成，导热好，电性能稳定，引出端采用镀锡铜针。
the matrix adopts more than 95% of high-quality ceramics (Al_2O_3), the resistance film is made of precious metal silver, ruthenium, palladium and other components of the paste, sintered at 850°C high temperature, good thermal conductivity, stable electrical performance, leading-out terminal of the tin-plated copper needle.

适用范围 scope of application

有高压和脉冲、浪涌的电路中都适用，使用场合相当广泛，如高压电力设备、高压电源、静电设备、喷涂设备、医疗CT&X光机、高压阻容器、真空设备、分压电路、高压测试设备、高压仪器仪表等。

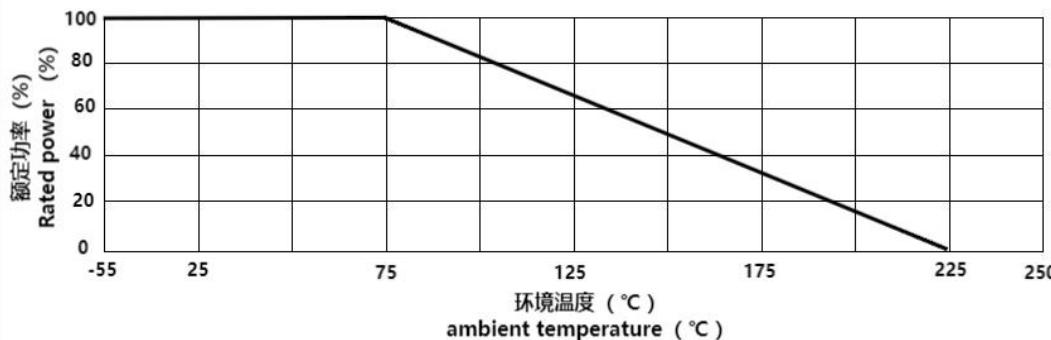
There are high voltage and pulse, surge circuit is suitable for a wide range of applications, such as high voltage power equipment, high voltage power supply, electrostatic equipment, spraying equipment, medical CT&X-ray machine, high voltage resistance container, vacuum equipment, pressure circuit, high voltage test equipment, high voltage instrumentation.

性能指标 Performance evaluation

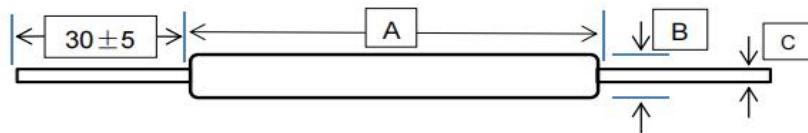
测试项目 Test Item	测试方法 Test method	性能指标 Performance indicators
过负荷特性 Overload characteristic	5倍额定功率，但不超过1.5倍最大持续工作电压，连续5秒钟 5 times the rated power, but not more than 1.5 times the maximum continuous operating voltage for 5 seconds	$\Delta R \leq \pm(0.2\%R + 0.1\Omega)$
工作环境温度 Operating ambient temperature	-55°C~225°C	空白 blank
介质耐压 Dielectric withstand voltage	1000VDC, 60秒 1000VDC, 60 second	空白 blank
负载稳定性 Load stability	1000小时额定功率(室温) 1000h rated power (room temperature)	$\Delta R \leq \pm(0.5\%R + 0.1\Omega)$
冷热冲击 Load stability	Mil-Std-202,方法107,条件C Mil-Std-202, Method 107, Condition C	$\Delta R \leq \pm(0.2\%R + 0.1\Omega)$
防潮能力 Moisture resistance	Mil-Std -202,方法106 Mil-Std-202, Method 106	$\Delta R \leq \pm(0.4\%R + 0.1\Omega)$
绝缘电阻 Insulation resistance		> 10000M

额定功率或电压/温度变化相关曲线

Rated power or voltage/temperature variation related curve



规格参数 Specification parameter



型号 Model	功率 Power 25°C (W)	功率 Power 125°C (W)	最大工作电压 Maximum operating voltage [KV]	脉冲电压[KV] Pulse voltage 1.2/50μS	可选精度范围[%] Optional accuracy range	尺寸 (mm) Size (mm)		
						A±2	B±1	C±0.05
HVR80A								
1505	0.5	0.3	2.5	4.0	D: ±0.5% F: ±1% G: ±2% J: ±5% K: ±10%	15	5	0.8
2205	0.8	0.5	3.5	5.0		22	5	0.8
2505	1.0	0.6	5.5	9.0		25	5	0.8
2905	1.2	0.8	6.3	10		29	5	0.8
4205	1.7	1.0	11	15		42	5	0.8
4805	2.0	1.2	13	28		48	5	0.8
2008	2.5	1.5	4.0	6.0		20	8	1.0
2608	3.5	2.1	6.0	9.0		26	8	1.0
4208	5.0	3.0	10	20		42	8	1.0
5208	6.0	3.5	15	30		52	8	1.0
7708	9.5	6.0	22	40		77	8	1.0
3009	4.5	2.7	10	15		30	9	1.0
5009	7.5	4.5	15	30		50	9	1.0
10209	12	7.2	32	50		102	9	1.0
12709	15	9.0	37	65		127	9	1.0
13709	17	10	40	70		137	9	1.0
15209	20	12	48	77		152	9	1.0
4211	7.5	4.6	11	20		42	11	1.0
7211	13	8.0	20	35		72	11	1.0
10211	18	11	32	50		102	11	1.0
14511	25	15	45	74		145	11	1.0

备注：1. 各种尺寸，规格，电阻值可接受定制。

Note: 1. Various sizes, specifications, and resistance values can be customized.

订购信息 ordering information

选型示例: HVR80AK15209K100MF(HVR80,引线, 黑色, 尺寸 152X9, $\pm 100\text{ppm}/^\circ\text{C}$, 100M , $\pm 1\%$)

Selection example: HVR80AK15209K100MF (HVR80, lead, black, size 152X9, $\pm 100\text{ppm}/^\circ\text{C}$, 100M, $\pm 1\%$)

HVR80	A	K	15209	K	100M	F
系列型号 Series Model	A=引线 lead wire	封装 Package K=黑色(black) H=红色(red) U=蓝色(blue)	尺寸 (长 X 直径) dimensions (Length X Diameter) 15209=152×9 7211=72×11 5208=52×8	温度系数 temperature coefficient J= $\pm 200\text{ppm}$ K= $\pm 100\text{ppm}$ L= $\pm 50\text{ppm}$	阻值 Resistance 10K2=10.2K 1M=1MΩ 1G5=1.5GΩ	精度 Accuracy D: $\pm 0.5\%$ F: $\pm 1\%$ G: $\pm 2\%$ J: $\pm 5\%$ K: $\pm 10\%$

颜色 colour	ROHS 检测报告 ROHS testing report	使用范围 Scope of use
大红袍 Red	无 No	空气中 in air
黑色硅树脂 Black silicone resin	有 Yes	空气、油、灌封中 Air, oil, and Potting
黑色/蓝色 环氧树脂 Black/Blue Epoxy Resin	有 Yes	灌封、油中 Potting and in oil