

HVE 高压玻璃釉电阻 High Voltage Glaze Resistors (HVE)



本体颜色: Body Color

标准品: Standard (Coffee or Blue 咖啡色或蓝色)

标示: Marking

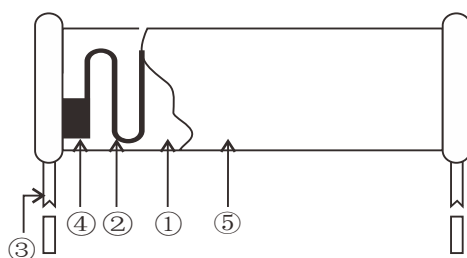
文字: Alphanumeric

(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



①	②	③	④	⑤
陶瓷基体 Ceramic core	玻璃釉质电阻膜层 Glazed resistive film	镀锡铜线或螺杆 Tinned copper lead wire or screw	银钯电极 Silver Palladium Pole	保护膜 Protective coating

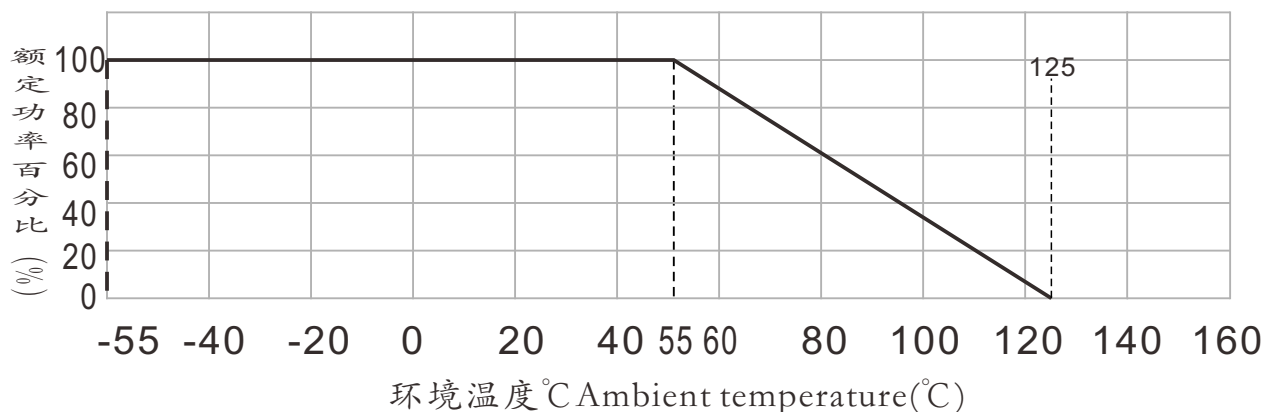
● 特性 Feature

- 无感设计
- 高精度
- 阻值范围宽
- 高耐压、高功率
- No Inductance
- Excellent Tolerance
- Wider resistance values
- High Voltage、High Power

● 应用 Application

- 1、冲击电压发生器
 - 2、电弧炉阻尼, 能源研究
 - 3、脉冲调制器, 雷达脉冲开成网络
 - 4、电容器的消弧电路, 高电压缓冲电路
 - 5、X-ray/头像设备和EMI/闪电抑制
- 1、Impulse voltage generator
 - 2、Electric-arc furnace damping,
 - 3、Pulse modulator, radar pulse opens the network
 - 4、Arc suppression circuit of capacitor, high voltage buffer circuit
 - 5、X-ray/head portrait equipment and EMI/ lightning suppression

● 降功耗曲线 Derating Curve



● 参考规格 Reference Standards

JIS C 5201-1

HVE 高压玻璃釉电阻 High Voltage Glaze Resistors(HVE)

功率、阻值范围与耐电压 Power And Resistance etc

额定功率 Rated Power(W)	阻值范围 Resistance Range (Ω)	温度系数 T.C.R (PPM/ $^{\circ}\text{C}$)	最大工作电压(KV) Maximum Working Voltage
HVE1/8W	100-4.7KM	≤ 200	2
HVE1/4W	100-10KM	≤ 200	4
HVE1/3W	100-10KM	≤ 200	4
HVE1/2W	100-10KM	≤ 200	10
HVE0.75W	100-10KM	≤ 200	15
HVE1.0W	100-10KM	≤ 200	15
HVE1.2W	100-10KM	≤ 200	15
HVE1.5W	100-10KM	≤ 200	15
HVE2W	100-10KM	≤ 200	15
HVE2.5W	100-10KM	≤ 200	20
HVE3W	100-10KM	≤ 200	20
HVE3.5W	100-10KM	≤ 200	20
HVE3.5W	100-10KM	≤ 200	25
HVE4W	100-100KM	≤ 300	25
HVE10W	100-200KM	≤ 300	25
HVE12W	100-200KM	≤ 300	30
HVE15W	100-200KM	≤ 300	30
HVE20W	100-200KM	≤ 300	30

注:

(1)环氧树脂在引线上的高度一般为2mm.

(1)Epoxy resin coating can be extended to 2mm down leads.

(2)最高工作电压是指电阻器封装于环氧树脂或浸没在硅油中可持续加载的电压。

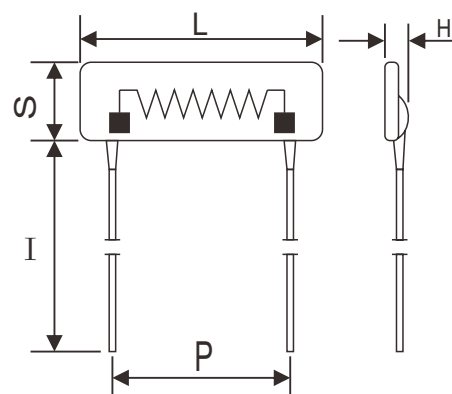
(2)E:Max voltage applied when the resistor is used in silicon oil or sealed with epoxy resin.

(3)电阻 (R),电压 (E), 功率 (P)由关系式 $E=\sqrt{PR}$ 决定, 且E和P都小于上表的值。

(3)Resistance(R),Voltage(E) and Power(P) are determined by $E=\sqrt{PR}$ (E, P must be less than data in the list above.)

外形尺寸 Dimensions

规格 Type	功率 Power	尺寸Dimensions(mm)					
		L ± 10	S ± 10	H ± 05	P ± 15	I ± 30	d ± 005
HVE1/8W	1/8W	8	3.5	2.5	5	24	0.56
HVE1/4W	1/4W	10	5	2.5	6	24	0.56
HVE1/3W	1/3W	22	4	2.5	18	24	0.56
HVE1/2W	1/2W	25	5	2.5	21	24	0.56
HVE0.75W	3/4W	35	5	2.5	30	24	0.56
HVE1.0W	1.0W	41	5	2.5	36	42	0.56
HVE1.2W	1.2W	25	10	2.5	21	30	0.56
HVE1.5W	1.5W	30	8	2.5	26	30	0.56
HVE2W	2W	33	8	2.5	28	35	0.56
HVE2.5W	2.5W	38	10	3	34	40	0.8
HVE3W	3W	45	10	3	42	45	0.8
HVE3.5W	3.5W	50	10	3	46	45	0.8
HVE3.5W	3.5W	30	15	3	26	35	0.8
HVE4W	4W	60	10	3	56	55	0.8
HVE10W	10W	80	20	4	76	60	0.8
HVE12W	12W	97	23	4	93	80	0.8
HVE15W	15W	100	35	4	96	80	1
HVE20W	20W	100	48	4	96	80	1



特殊产品的功率与尺寸, 请与我们的工程师讨论, 我们提供定制服务 kwx@kwxcom.com
Special products of the power and size, please contact our engineers discuss kwx@kwxcom.com

● 无电感性能特点

HVE采用无感设计，独特的玻璃釉膜按照类似"长城"图案分布,这种高效率的无电感量设计,不会降低任何电阻性能优势，非常适合要求高频率的产品应用。电感量在 $0.1\mu\text{H}\sim 1\mu\text{H}$

HVE use non-inductive design, special glazed film, distribute itself like the Great Wall pattern, this high efficiency and non-inductive design will not cut any advantages of the resistor's function. It is perfect for products which request high frequency. Inductor value keeps at $0.1\mu\text{H}\sim 1\mu\text{H}$



● 性能Performance

试验项目 TEST ITEM	性能要求 SPECIFICATIONS
阻值精度 Resistance Tolerance	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$ $\pm 10\%$ 如有特殊需要可提供0.5% tolerance to 0.5% on special order
温度系数 Temperature Coefficient	200ppm/°C (测试区间: $+25^{\circ}\text{C}\sim +125^{\circ}\text{C}$; $+25^{\circ}\text{C}\sim -55^{\circ}\text{C}$) 200ppm/°C (Referenced to $+25^{\circ}\text{C}$, R_{Δ} taken at $+125^{\circ}\text{C}$ and -55°C)
寿命 Load life	$+125^{\circ}\text{C}$, 1000小时 $\Delta R \leq 0.5\%$
绝缘层电阻 Insulate resistance	$\geq 1000\text{M}\Omega$
涂覆层 Encapsulation	高温硅树脂 High temperature silicone conformal
过载 Over load	2.5额定功率 (≤ 1.5 Max. operating voltage) 5s $\Delta R \leq 0.5\%$
热冲击 Thermal shock	$\Delta R \leq 0.25\%$
耐潮性能 Moisture resistance	$\Delta R \leq 0.4\%$
使用温度 Temperature	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$

● 料号编号 ordering Information

例 example

HVE	18	J	100K0	A
型号 Type	额定功率 Rated Power	误差值 Tolerance	电阻值 (Ω) Resistance	特殊码 Special forming
	18: 1/8W 14: 1/4W 01: 1W 02: 2W 03: 3W 100: 100W	F($\pm 1\%$) G($\pm 2\%$) J($\pm 5\%$) K($\pm 10\%$)	100K0=100K Ω 1M0=1M Ω	