

HVS 线绕电阻器 WIRE WOUND RESISTOR(High Pulse Voltage)



本体颜色: Body Color

标准品: Standard(Gray 灰色)

标示: Marking

色环: Color Code(1/4W-5W)

文字: Alphanumeric(6W-10Ws)

(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 表面涂不燃性涂料, 具不燃与绝缘之安全特性 (UL94V-0)

Flameproof and insulating coating designed to assure safe usage by special non-flammable silicon-base.(Eqyuvakebt to UL94V-0)

II 耐热性好、温度系数小、噪声低、负荷功率大

Good heat-durability, low temperature coefficient, low noise, high overload power

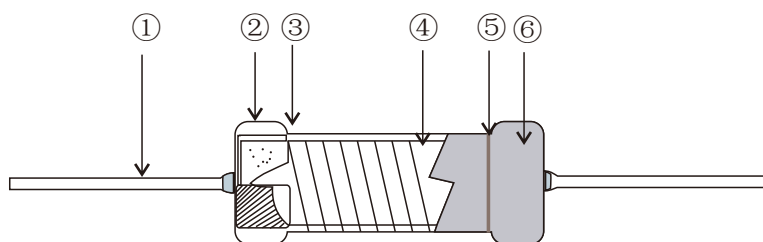
III 长期稳定性强

Stable long service life

IV 产品符合欧盟RoHS要求

Products meet Eu-RoHS.

● 结构图 Construction



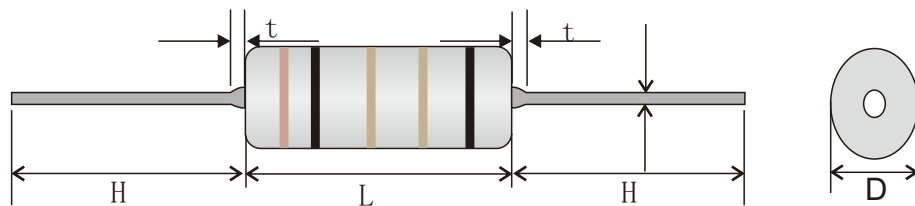
1	2	3	4	5	6
端子线	线帽	瓷棒	绕线	标示	绝缘涂料
lead wire	cap	ceramic base	wire wound	marking or color code	insulation coat

● 参考规格Reference Standards

JIS C 5201-1

HVS 线绕电阻器 WIRE WOUND RESISTOR(High Pulse Voltage)

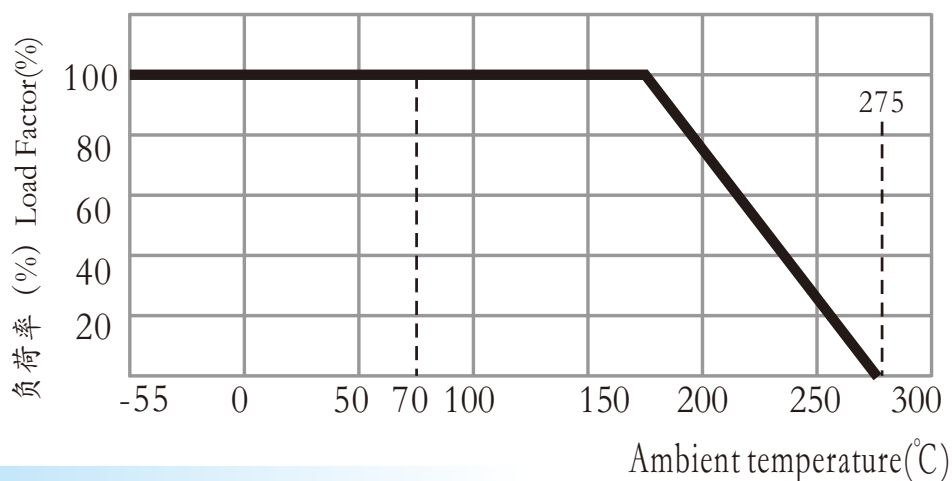
尺寸、功率、阻值范围与耐电压 Dimensions And Resistance etc



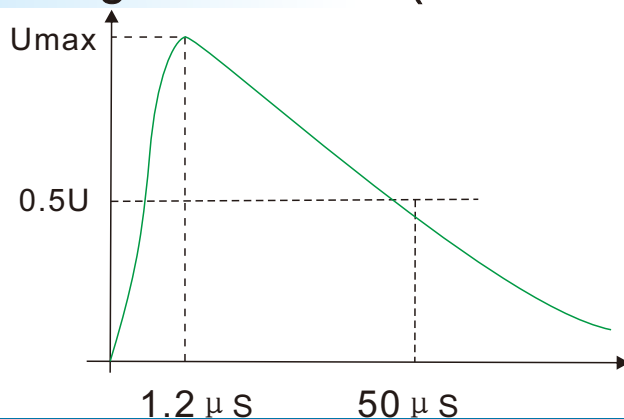
规格 Type	功率 Power		阻值范围 Resistance Range (Ω)	尺寸Dimensions(mm)					最高使用电压 Max working Voltage	耐电压 Dielectric with standing	耐脉冲电阻 Pulse with standing voltage	温度系数 T.C.R
	标准型 Standard	小型化 Small volume		L ± 1	t max	D ± 0.5	H ± 3	d ± 0.05				
HVS14	1/4W	1/2WS	0.1~2K Ω	6.5	1.0	2.5	28.0	0.60	$\sqrt{PR}$	300V	2KV	$\geq 20\Omega$ $\pm 300PPM/^{\circ}C$
HVS12	1/2W	1WS	0.1~3K Ω	9.0	1.0	3.5	28.0	0.60	$\sqrt{PR}$	350V	4KV	
HVS01	1W	2WS	0.1~5K Ω	11.0	2.5	4.0	28.0	0.70	$\sqrt{PR}$	500V	5KV	$10\Omega \sim 20\Omega$ $\pm 100PPM/^{\circ}C$
HVS02	2W	3WS	0.1~8K Ω	15.0	2.5	5.0	28.0	0.70	$\sqrt{PR}$		6KV	
HVS03	3W	4WS	0.1~8K Ω	15.0	2.5	5.0	28.0	0.70	$\sqrt{PR}$		8KV	$1\Omega \sim 9.9\Omega$ $\pm 150PPM/^{\circ}C$
HVS04	4W	5WS	0.1~10K Ω	17.0	2.5	6.0	28.0	0.70	$\sqrt{PR}$		8KV	
HVS05	5W	6WS	0.1~10K Ω	25.0	2.5	8.5	38.0	0.75	$\sqrt{PR}$		9KV	$0.05\Omega \sim 0.099\Omega$ $\pm 350PPM/^{\circ}C$
HVS07	7W	8WS	0.1~15K Ω	30.0	2.5	8.5	38.0	0.75	$\sqrt{PR}$		10KV	
HVS08	8W	9WS	0.1~15K Ω	40.0	2.5	8.5	38.0	0.75	$\sqrt{PR}$		11KV	$0.01\Omega \sim 0.049\Omega$ $\pm 600PPM/^{\circ}C$
HVS09	9W	10WS	0.1~15K Ω	53.0	2.5	8.5	38.0	0.75	$\sqrt{PR}$		11KV	

注意：选择耐脉冲高压绕线电阻，需要客户明示，脉冲高压数值，脉冲持续时间等，具体需求请联系我们工程师咨询kwx@kwxcom.com

额定温度下降曲线图 Derating Curve



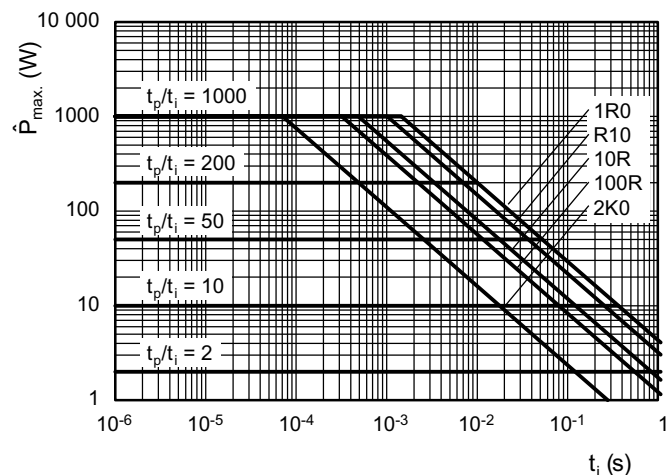
浪涌曲线图 Surge Waveform(1.2/50 μ S)



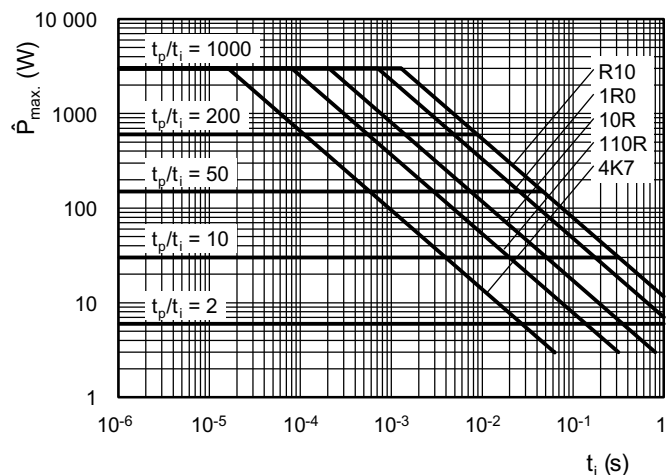
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脉冲功率曲线图 Pulse Voltage Overload Test

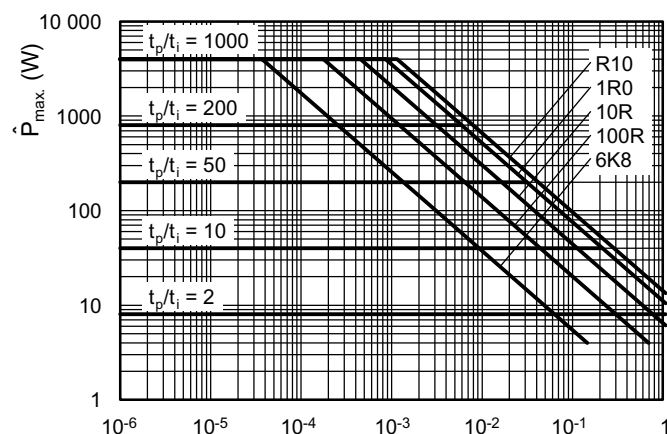
I PULSE DIAGRAMS



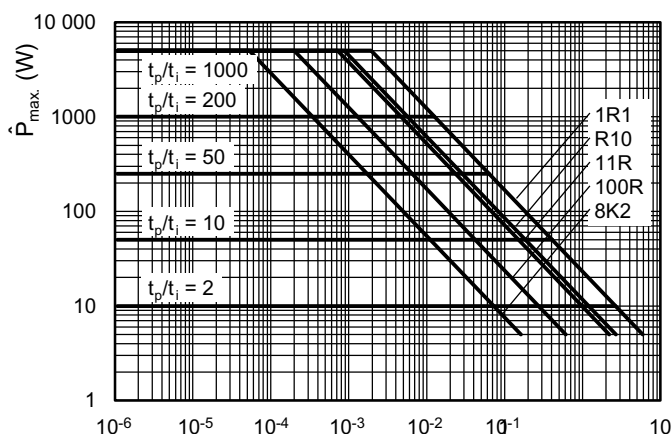
HVS01 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)



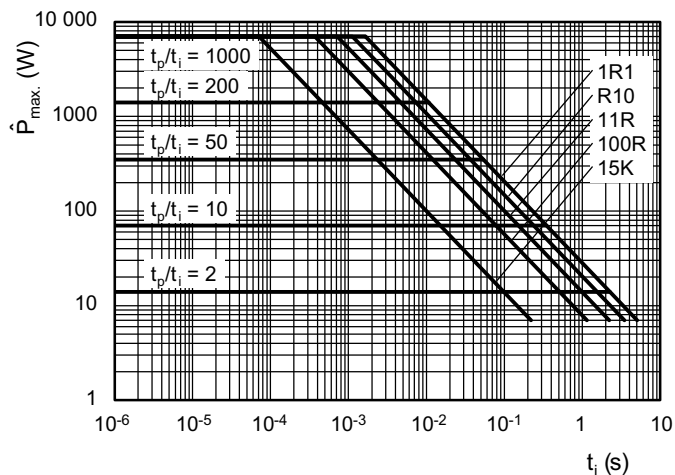
HVS03 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)



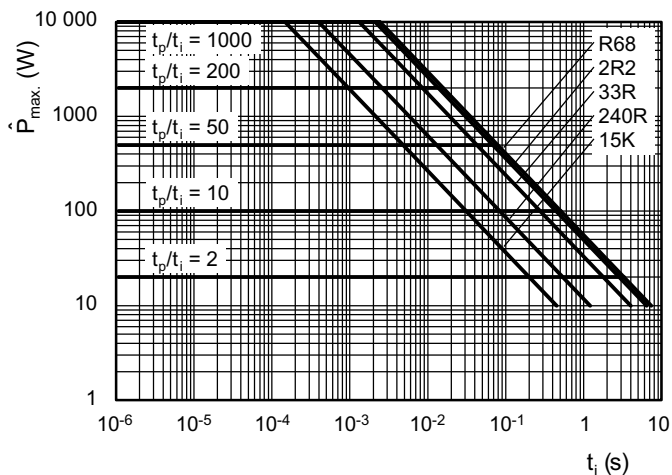
HVS04 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)



HVS05 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)



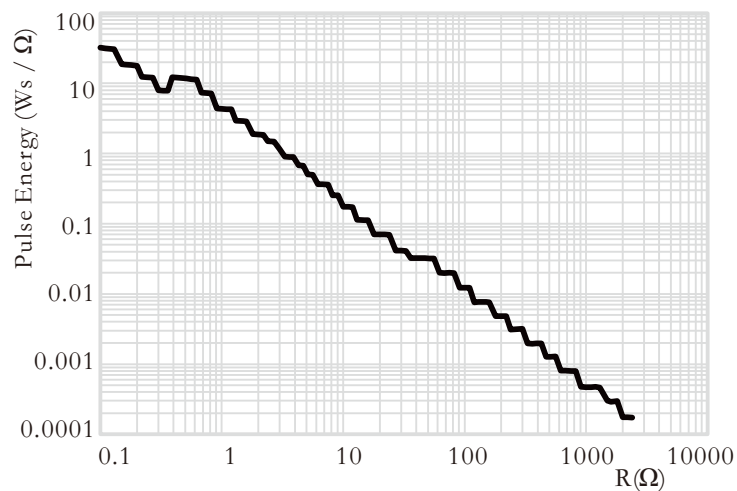
HVS07 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)



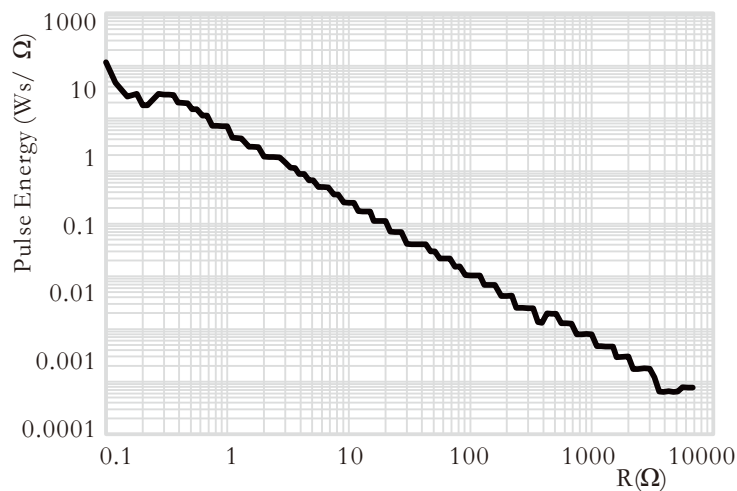
HVS09 Pulse on a regular basis; max. permissible peak pulse power (max.) as a function of pulse duration (t_i)

HVS 线绕电阻器 WIRE WOUND RESISTOR(High Pulse Voltage)

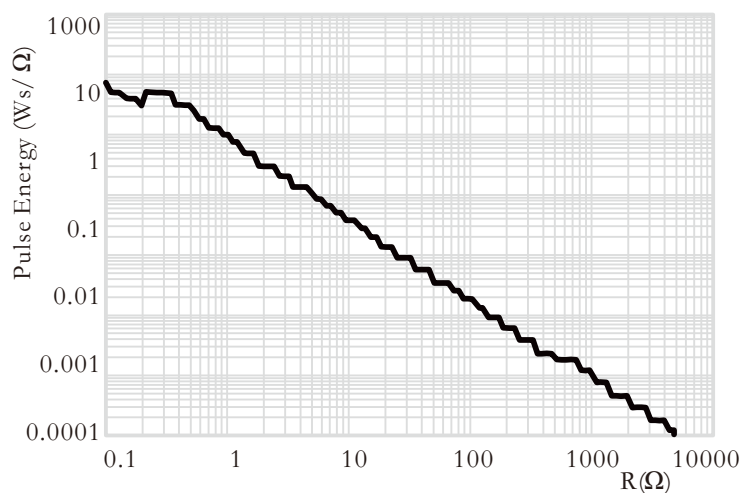
II PULSE DIAGRAMS



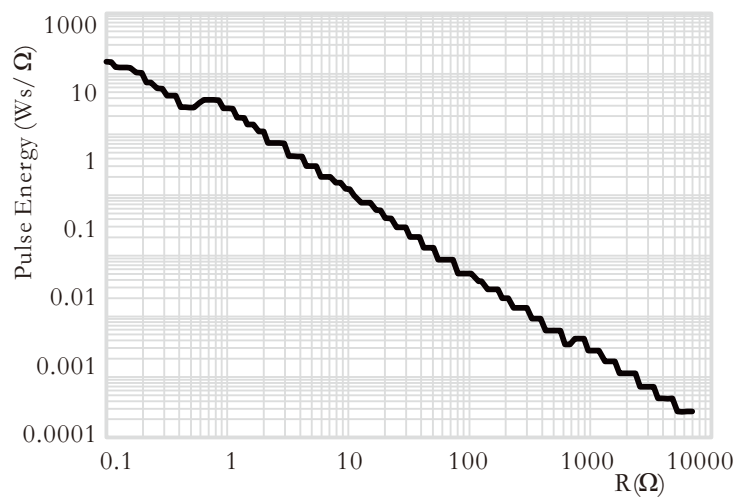
HVS01 Pulse capability; E (W_s) as a function of R (Ω)



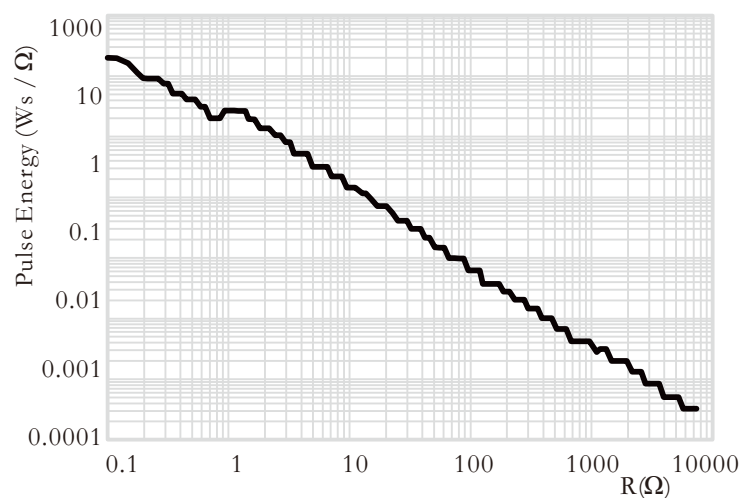
HVS02 Pulse capability; E (W_s) as a function of R (Ω)



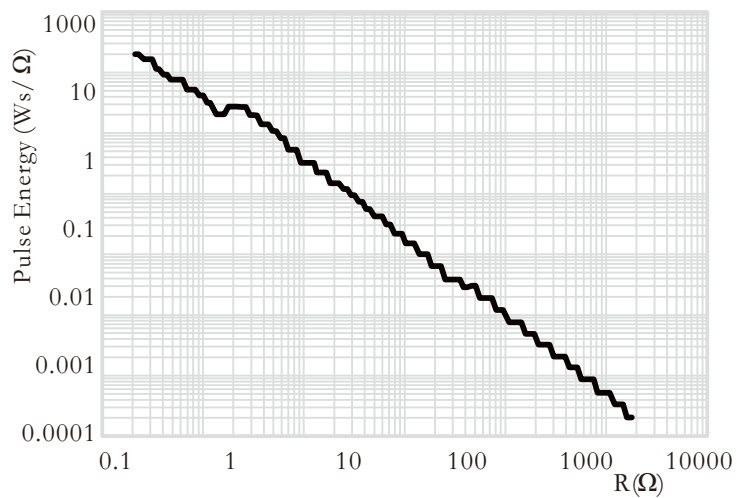
HVS03 Pulse capability; E (W_s) as a function of R (Ω)



HVS04 Pulse capability; E (W_s) as a function of R (Ω)



HVS07 Pulse capability; E (W_s) as a function of R (Ω)

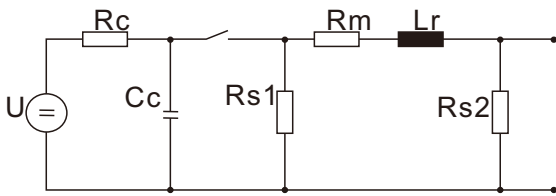


HVS09 Pulse capability; E (W_s) as a function of R (Ω)

*Please consult us for more pulse power

HVS 线绕电阻器 WIRE WOUND RESISTOR (High Pulse Voltage)

性能 Performance

试验项目 Test Items	规格值 Performance Requirements	试验方法 Test Methods(JIS C 5201-1)																																
电阻值 Resistance	规定的误差值内 Within specified tolerance	测量点从端盖10mm Measuring points are 10mm from the end cap																																
温度系数 T.C.R.	规定值内 Within specified T.C.R	室温+100℃ Room temperature+100℃																																
短时间过负荷 Short time overload	± (1%R+0.05Ω)	4倍额定功率，5秒 4 times the rated power for 5 seconds																																
负荷寿命 Load life	± (5%R+0.1Ω)	Rated voltage at 70℃ for 1,000 hours 1.5hr ON/0.5hr OFF Cycles																																
耐湿负荷寿命 Load life in humidity	± (5%R+0.1Ω)	额定电压40℃，95% RH，1000小时 Rated voltage at 40℃ ,95%RH for 1,000 hours																																
耐湿性 Moisture resistance	± (1%R+0.05Ω)	40℃ ,95% RH,240小时 40℃ ,95%RH for 240 hours																																
温度循环 Temperature cycle	± (1%R+0.05Ω)	5 cycles for -25℃ (30min);room temp.(30min) ~+85℃ (30min)room temp.(30min)																																
焊锡效果 Solderability	95%(min)coverage	Temp. of solder 245℃ ±5℃ duration of immersion3s±0.5s																																
焊锡耐热 Resistance to soldering heat	± (1%R+0.05Ω)	260℃ ±5℃ for 10 seconds(焊锡槽) 350℃ ±10℃ for 3.5 seconds(手焊锡)																																
绝缘电阻 Insulation resistance	> 1,000MΩ	500V绝缘测试1分钟 500V insulation test 1min.																																
不燃性 Flameproof	无燃烧现象 No evidence of flaming or arcing	AC voltage of 2,4,6,8,16,32 times the power rating for 1min.(V≤4times max, working voltage)																																
浪涌试验方式: Surge Immunity Test:	± (5% + 0.05Ω) Max. 按照 最大浪涌电压 IEC61000-4-5  1.2μsec rising time and 50μsec discharge; every 1 minute for 10 cycle <table><tr><td>1/2W</td><td>4KV</td></tr><tr><td>1WS</td><td></td></tr><tr><td>1W</td><td>5KV</td></tr><tr><td>2WS</td><td></td></tr><tr><td>2W</td><td>6KV</td></tr><tr><td>3WS</td><td></td></tr><tr><td>3W</td><td>8KV</td></tr><tr><td>5WS</td><td></td></tr><tr><td>5W</td><td>9KV</td></tr><tr><td>7WS</td><td></td></tr><tr><td>7W</td><td>10KV</td></tr><tr><td>8WS</td><td></td></tr><tr><td>8W</td><td>11KV</td></tr><tr><td>9WS</td><td></td></tr><tr><td>9W</td><td>12KV</td></tr><tr><td>10WS</td><td></td></tr></table>		1/2W	4KV	1WS		1W	5KV	2WS		2W	6KV	3WS		3W	8KV	5WS		5W	9KV	7WS		7W	10KV	8WS		8W	11KV	9WS		9W	12KV	10WS	
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Storage Temperature: 25 $\pm$ 3℃; Humidity 60%RH $\pm$ 10%

料号编号 ordering Information

例 example

HVS	14	S	J	R100
型号 Type	额定功率 Rated Power	型号 Style	误差值 Tolerance	电阻值 (Ω) Resistance
HVS	14:1/4W 12:1/2W 01:1W 02:2W 03:3W	S1=Standard S2=Small volume	F $\pm 1\%$ J $\pm 5\%$	R100=0.1 Ω 1R00=1 Ω 10R0=10 Ω 100R00=100 Ω