

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



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

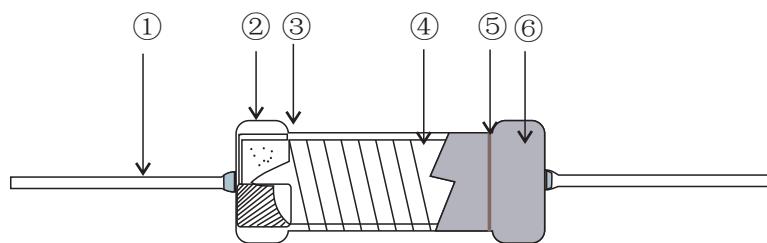
III 长期稳定性强

Stable long service life

IV 产品符合欧盟RoHS要求

Products meet Eu-RoHS.

● 结构图 Construction



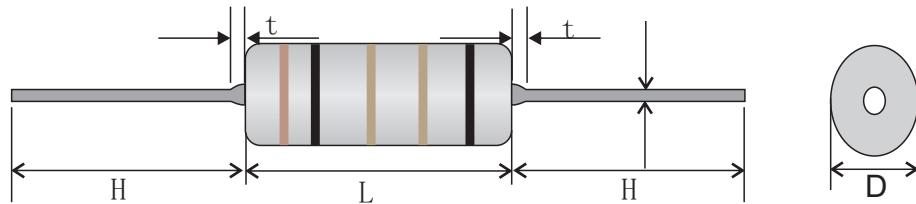
1	2	3	4	5	6
端子线 lead wire	线帽 cap	瓷棒 ceramic base	绕线 wire wound	标示 marking or color code	绝缘涂料 insulation coat

● 参考规格 Reference Standards

JIS C 5201-1

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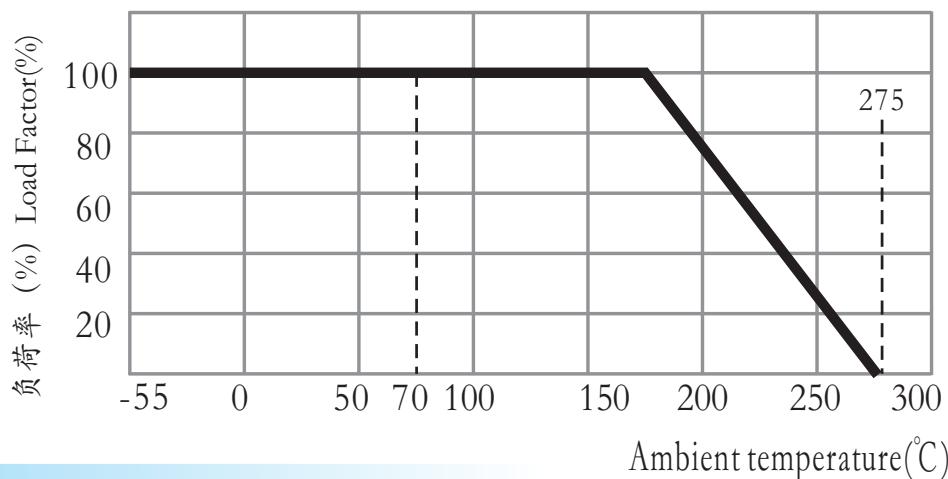
● 尺寸、功率、阻值范围与耐电压 Dimensions And Resistance etc



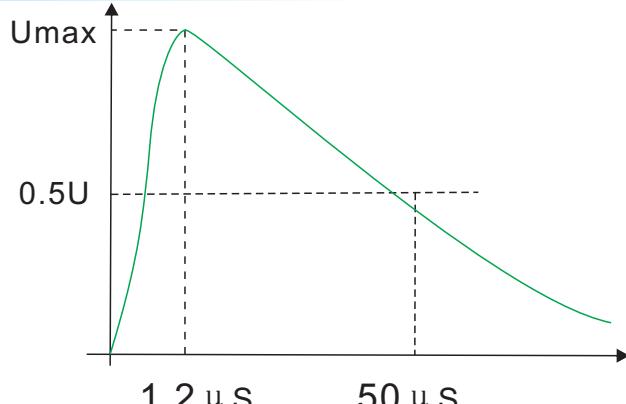
规格 Type	功率 Power		阻值范围 Resistance Range (Ω)	尺寸Dimensions(mm)					最高使 用电压 Max working Voltage	耐电压 Dielectric with standing voltage	耐脉冲电 压 Pulse with standing voltage	温度系数 T.C.R
	标准型 Standard	小型化 Small volume		L±1	t max	D±0.5	H±3	d±0.05				
HVS14	1/4W	1/2WS	0.1~2KΩ	6.5	1.0	2.5	28.0	0.60	\sqrt{PR}	300V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



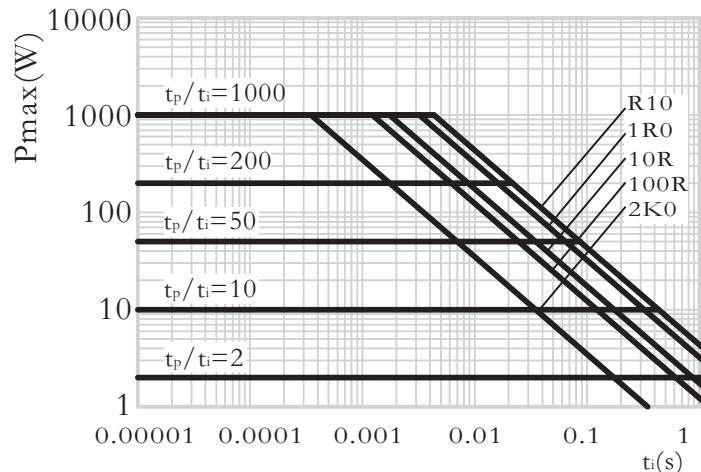
● 浪涌曲线图 Surge Waveform(1.2/50 μS)



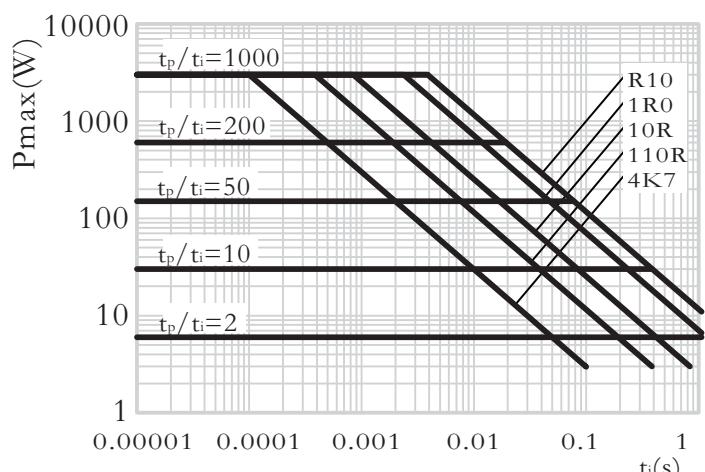
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脉冲功率曲线图 Pulse Voltage Overload Test

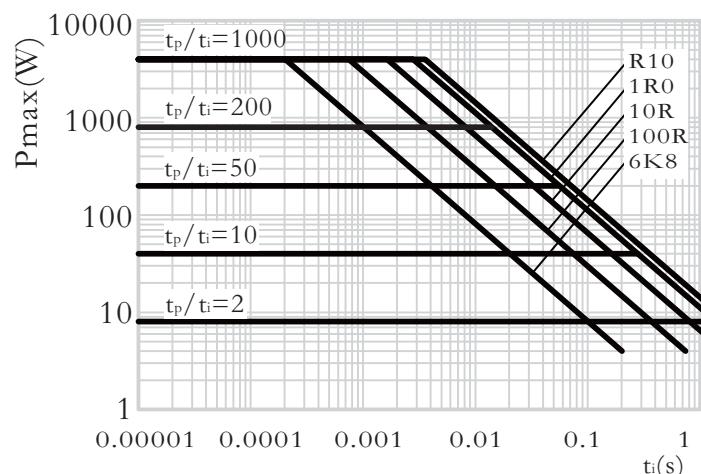
I PULSE DIAGRAMS



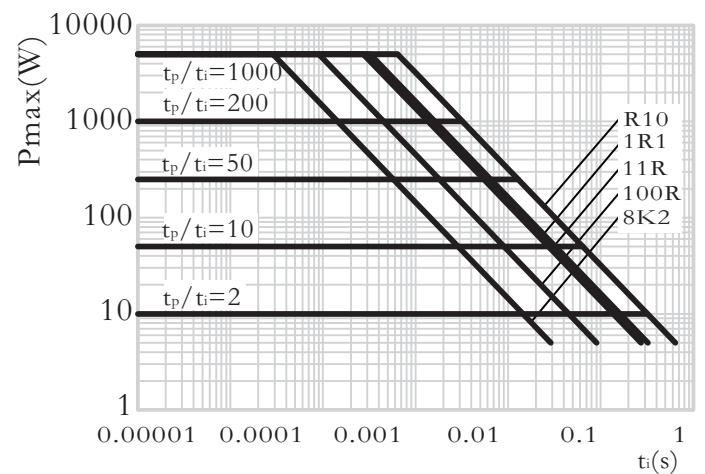
HVS01 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)



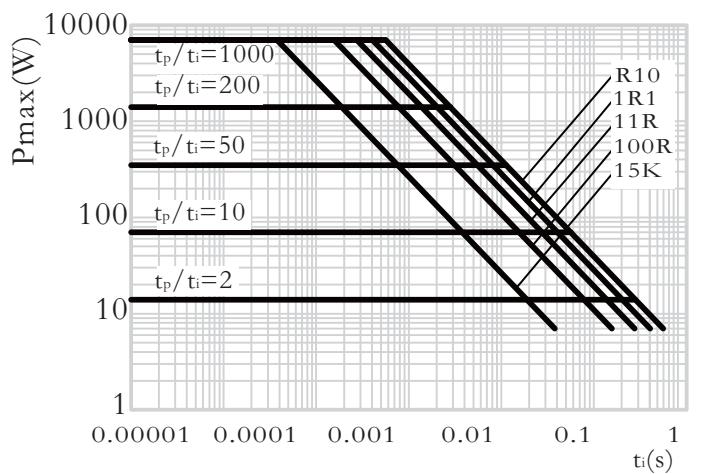
HVS02 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)



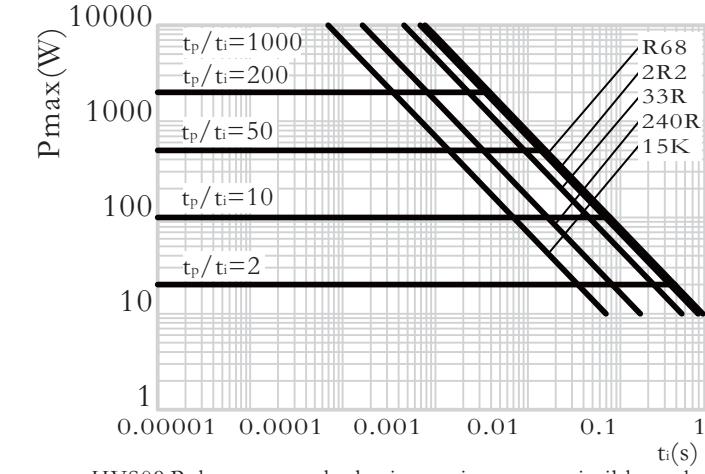
HVS03 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)



HVS04 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)



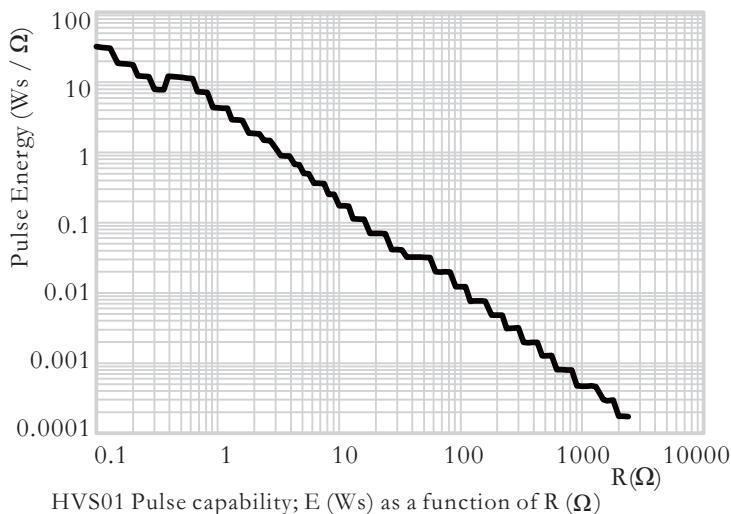
HVS07 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)



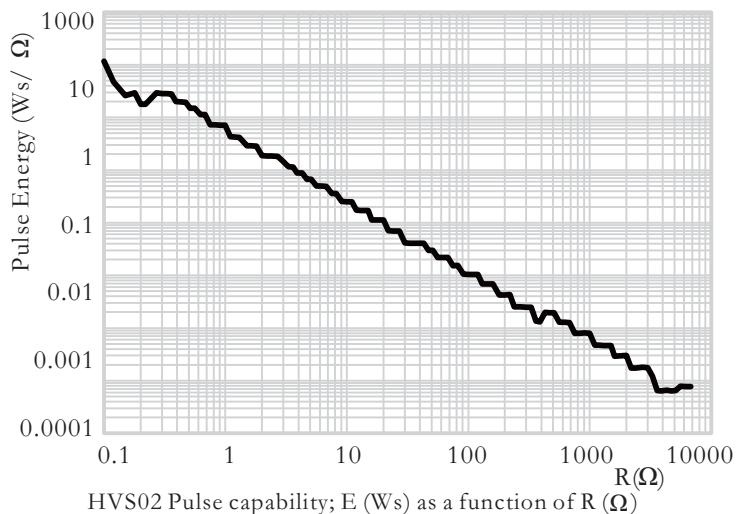
HVS09 Pulse on a regular basis; maximum permissible peak pulse power (\hat{P}_{max}) as a function of pulse duration (t_i)

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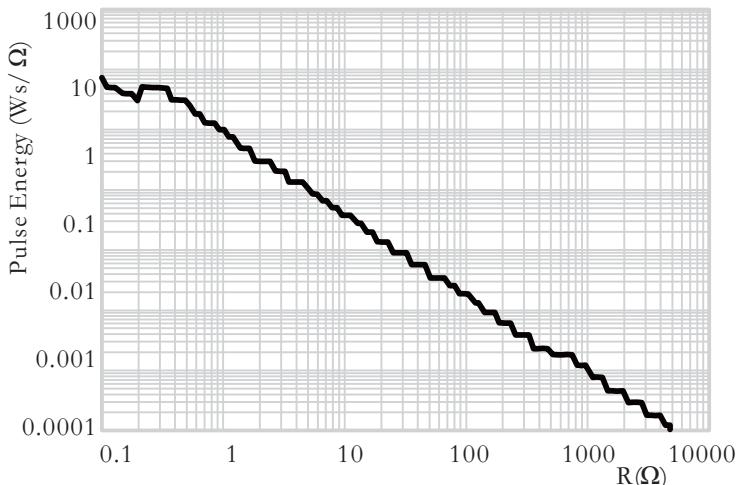
II PULSE DIAGRAMS



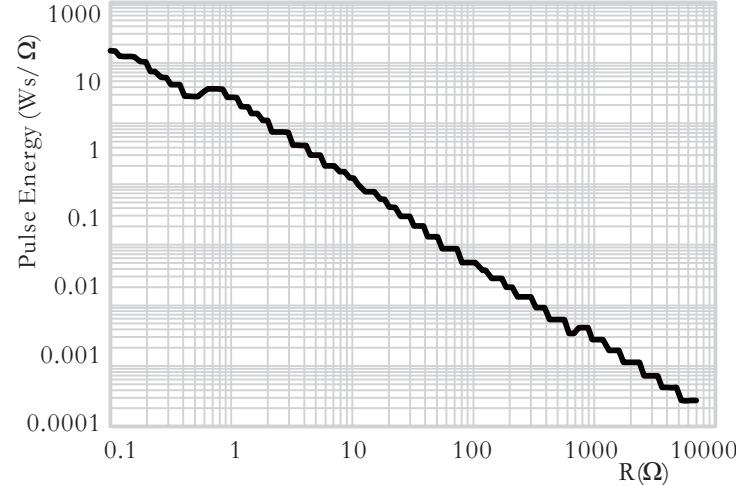
HVS01 Pulse capability; E (Ws) as a function of R (Ω)



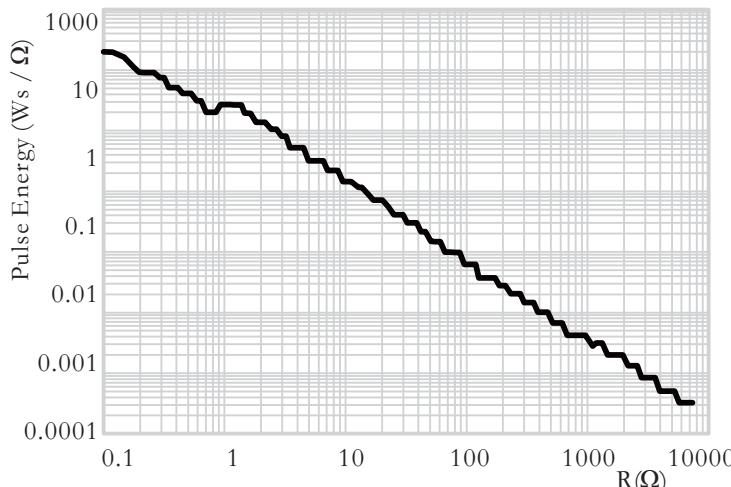
HVS02 Pulse capability; E (Ws) as a function of R (Ω)



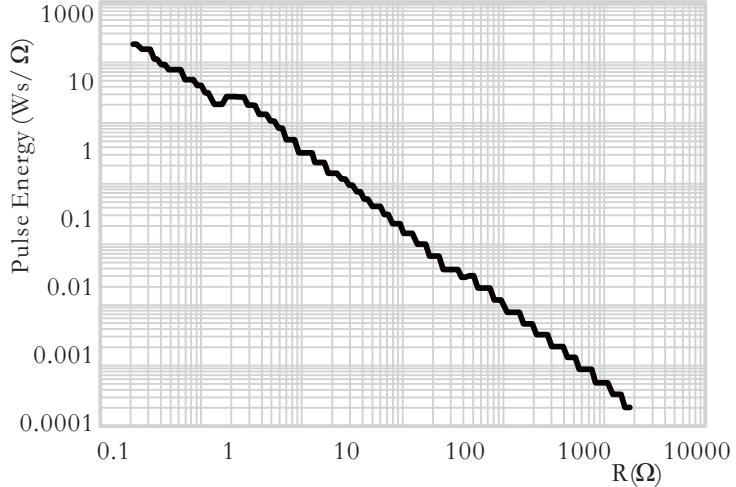
HVS03 Pulse capability; E (Ws) as a function of R (Ω)



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



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

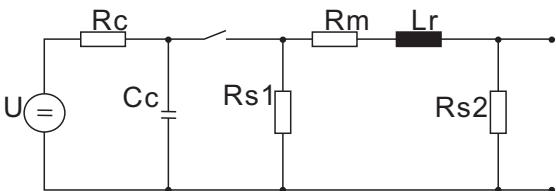


HVS09 Pulse capability; E (Ws) as a function of R (Ω)

* Please consult us for more pulse power

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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°C Room temperature+100°C	
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°C 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°C, 95% RH, 1000小时 Rated voltage at 40°C, 95%RH for 1,000 hours	
耐湿性 Moisture resistance	±(1%R+0.05Ω)	40°C, 95% RH, 240小时 40°C, 95%RH for 240 hours	
温度循环 Temperature cycle	±(1%R+0.05Ω)	5 cycles for -25°C (30min); room temp.(30min) ~ +85°C (30min) room temp.(30min)	
焊锡效果 Solderability	95%(min)coverage	Temp. of solder 245°C ± 5°C duration of immersion 3s ± 0.5s	
焊锡耐热 Resistance to soldering heat	±(1%R+0.05Ω)	260°C ± 5°C for 10 seconds (焊锡槽) 350°C ± 10°C 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 1 min.	
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 1 min. (V ≤ 4times max, working voltage)	
浪涌试验方式: Surge Immunity Test:	±(5% + 0.05Ω) Max.	按照 IEC61000-4-5  1.2μsec rising time and 50μsec discharge; every 1 minute for 10 cycle	最大浪涌电压 (V)
			1/2W 4KV 1WS 5KV 2WS 6KV 2W 8KV 3WS 9KV 3W 10KV 5W 11KV 7W 12KV 7W 13KV 8W 14KV 9W 15KV 9W 16KV 10WS 17KV

Storage Temperature: 25 ± 3°C; Humidity 60% RH ± 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 ± 1% J ± 5%	R100=0.1Ω 1R00=1Ω 10R0=10Ω 100R0=100Ω