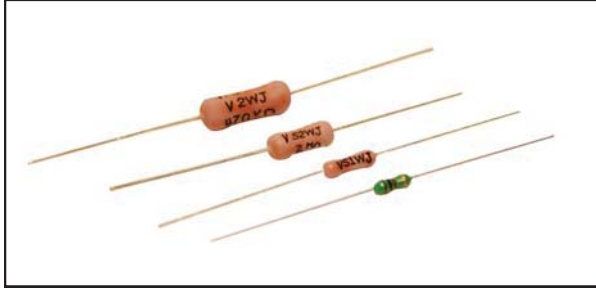


# HIGH VOLTAGE PATH RESISTOR

**RVU** 耐突波電阻器  
SURGE RESISTOR (Standard Type)

**RVS** 小型耐突波電阻器  
SURGE RESISTOR (Small Type)

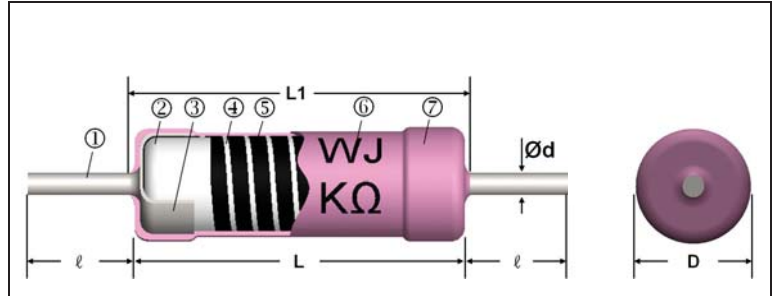


塗裝顏色：Coating Color

標示：Marking

文字：Alphanumeric

## 結構圖 Construction



1	端子線	Lead wire	5	金屬釉皮膜	Metal glaze film
2	瓷棒	Ceramic base	6	標示	Marking
3	鐵帽	Cap			
4	切割線	Helical cutting groove	7	絕緣塗料	Insulation coat

## 特性 Feature

- ◎阻值範圍：680K~3G
- ◎ Resistance value range is 680K~3G.
- ◎長期穩定性佳
- ◎ Stable and long service life.
- ◎可承受 10KV 突波的衝擊
- ◎ Acceptable pulse of 10KV discharge.
- ◎溫度係數小
- ◎ Small temp. coeff. of resistance.
- ◎產品符合歐盟 RoHS 要求
- ◎ Products meet EU-RoHS.

## 外型尺寸 Dimensions

Rated Power (W)	Dimensions (mm)					Weight (g) (1000pcs)
	L	L1 Max.	D	Ød	ℓ	
1/2,S1	9±0.5	11	3.3±0.5	0.6±0.05	28±3	285
1,S2	12±1	15	4.5±0.5	0.8±0.05	38±3	728
2,S3	16±1	18	5.5±0.5	0.8±0.05	38±3	1380

## 料號編碼 Type composition

例 Example

RV	U	12	J	1004	A520	NH	
型名 Type	品名 Size	額定功率 Rated Power	誤差值 Tolerance	電阻值(Ω) Resistance	二次加工 Forming	端子線 Lead Wire	
	U: Standard	12:1/2W	J±5%	1003=100K	See table	熱鍍線	
	S: Small	01:1W		1004=1M	below	Heat plated	
		02:2W					
		03:3W					SS :Small

## 參考規格 Reference standards

- JIS C 5201-1

## 二次加工對應表 Taping & Forming Matrix

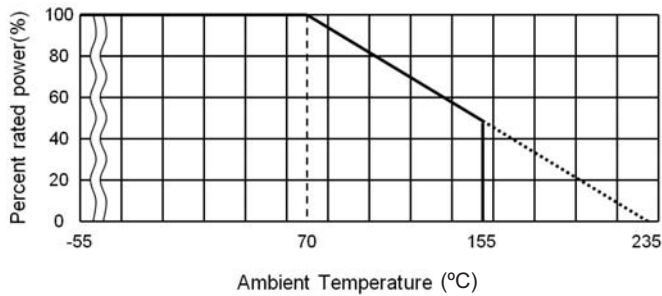
Rated Power (W)	Taping			Radial Taping		L Forming				C Forming			F Forming				M Forming			D Forming			
	A26	A52	A64	FT	YT	L10	L12.5	L15	L20	C12.5	C15	C20	FA5	FB5	FC5	FD5	M12.5	M15	M20	D12.5	D15	D20	
1/2,S1	-	○	-	○	○	-	○	-	-	○	-	-	○	○	○	○	○	-	-	○	-	-	-
1,S2	-	○	○	○	○	-	-	○	-	-	○	-	○	○	○	○	-	○	-	-	○	-	-
2,S3	-	○	○	-	○	-	-	-	○	-	-	○	○	○	○	○	-	-	○	-	-	-	○

## 額定 Ratings

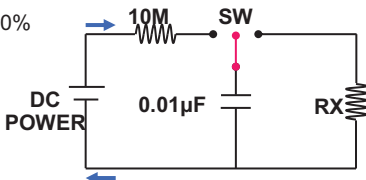
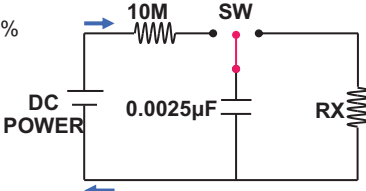
Rated Power (W)	阻值範圍 Resistance Range (Ω)	最高使用電壓 Max. Working Voltage DC	耐電壓 Dielectric Withstanding Voltage DC	溫度係數 T.C.R.	包裝 Taping/Ammo,Forming/Bulk pack (pcs)									
	J±5% (E24)				A26	A52	A64	FT	YT	L	C	M	D	
1/2,S1	> 680K	3500V	700V	± 200ppm/°C	-	2000	-	2000	2000	2500	2500	2500	2500	
1,S2		7000V			-	1000	1000	1000	1000	1000	1000	1000		
2,S3		10000V			-	500	500	1000	1000	1000	1000	1000	1000	

■ 額定溫度下降曲線圖 Derating curve

例 Example



■ 性能 Performance

試驗項目 Test Items	規格值 Performance Requirements	試驗方法 Test Methods
電阻值 Resistance	規定的誤差值內 Within specified tolerance	測量點從端蓋 10 mm Measuring points are 10 mm from the end cap
溫度係數 T.C.R.	規定值內 Within specified T.C.R.	室溫+100°C Room temperature +100°C
短時間過負荷 Short time overload	±(1%+0.05Ω)	6.25 倍額定功率，5 秒 6.25 times the rated power for 5 seconds
負荷壽命 Load life	±(1.5%+0.1Ω)	Rated voltage at 70°C for 1,000 hours 1.5hr ON / 0.5hr OFF Cycles
耐濕負荷壽命 Load life in humidity	±(5%+0.1Ω)	10% rate power load 40°C, 95% RH for 1,000 hours; 1.5h ON / 0.5h OFF cycle
耐濕性 Moisture resistance	±(1%+0.05Ω)	40°C, 95% RH, 240 小時 40°C, 95% RH for 240 hours
溫度循環 Temperature cycle	±(1%+0.05Ω)	5 cycles for -25°C (30min); room temp. (30min) ~ +85°C (30min) room temp. (30min)
焊錫耐熱 Resistance to soldering heat	±(1%+0.05Ω)	260°C ± 5°C for 10 seconds (焊錫槽) 350°C ± 10°C for 3.5 seconds (手焊錫)
絕緣電阻 Insulation resistance	≥ 50GΩ	500V 絕緣測試 1 分鐘 500V insulation test 1min.
UL 脈衝測試 UL Pulse withstanding voltage	± 20% 	The following discharge cycle is repeated in the circuit of the left fig. 2.5 sec. ON 2.5 sec. OFF 50 cycles. Test voltage (DC surge) 10KV(Max)
臺灣雙羽脈衝試驗 Futaba Pulse withstanding voltage	± 3% 	The following discharge cycle is repeated in the circuit of the left fig. 1 sec. ON 1 sec. OFF 50 cycles. Test voltage (DC surge) is shown below: Pulse voltage : 14KV(Max)

耐突波測試 Surge Test

High Energy Test 高能量測試		Low Energy Test 低能量測試	
ITEM 項目	SPEC. 規格	ITEM 項目	SPEC. 規格
Capacitance 電容值 (µF)	0.12µF	Capacitance 電容值 (µF)	0.03µF
Voltage 電壓 (KV)	10KV	Voltage 電壓 (KV)	10KV
Charging/Discharge Time 充/放電時間	10sec / 2sec	Charging/Discharge Time 充/放電時間	10sec / 2sec
Cycle 週期	12sec	Cycle 週期	12sec
Charging/Discharge Cycles 充/放電次數	1,000 Cycles	Charging/Discharge Cycles 充/放電次數	10,000 Cycles
Criteria 判定標準	+ 100% ~ -20%	Criteria 判定標準	+ 100% ~ -10%