

POWER TYPE

RSU 氧化金屬膜電阻器
METAL OXIDE FILM RESISTOR (Standard Type)

RSS 小型氧化金屬膜電阻器
METAL OXIDE FILM RESISTOR (Small Type)

RSP 超小型氧化金屬膜電阻器
METAL OXIDE FILM RESISTOR (Super Small Type)



塗裝顏色 : Coating Color

標準品 : Standard Type (Gray)

小型品 : Small Type (Pink)

超小型品 : Super Small Type (Pink)

標示 : Marking

色碼 : Color Code (1/4W、S1/2W)

文字 : Alphanumeric (1/2W~S5W)

特性 Feature

◎ 使用不燃性塗料，具不燃與絕緣之安全特性(UL94 V-0)

◎ Flameproof and insulating coating designed to assure safe usage by special non-flammable silicon-base.

(Equivalent to UL94 V-0)

◎ 小型化能高密度插裝

◎ Small size are good for high density application.

◎ 高信賴性

◎ High reliability.

◎ 耐熱性佳,表面溫升低

◎ High thermal stability and low surface temperature rise.

◎ 產品符合歐盟 RoHS 要求

◎ Products meet EU-RoHS.

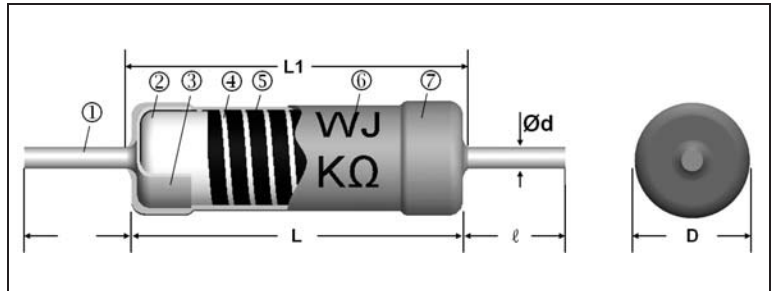
參考規格 Reference standards

● JIS C 5201-1

額定 Ratings

Rated Power (W)	阻值範圍 Resistance Range (Ω)			最高使用電壓 Max. Working Voltage DC	最高過負荷電壓 Max. Overload Voltage DC	耐電壓 Dielectric Withstanding Voltage DC	溫度係數 T.C.R.	包裝 Taping/Ammo, Forming/Bulk pack (pcs)					
	F±1% (E96)	G±2% (E24)	J±5% (E24)					A52	A64	A73	FT	YT	L
1/4,S1/2,P1	0.1 ~ 33K			250V	500V	250V	± 350ppm/°C	2500	—	—	2000	—	2500
1/2,S1,P2	0.1 ~ 33K	0.1 ~ 100K						2000	—	—	2000	2000	2500
1,S2,P3	0.1 ~ 33K	0.1 ~ 100K		350V	700V	350V		1000	1000	—	1000	1000	1000
2,S3,P5	0.1 ~ 33K	0.1 ~ 100K						500	500	500	—	1000	1000
3,S5	0.1 ~ 33K	0.1 ~ 100K						—	—	—	—	—	200

結構圖 Construction



1	端子線	Lead wire	5	導電皮膜	Conductive film
2	瓷棒	Ceramic base	6	標示	Marking or color code
3	鐵帽	Cap			
4	切割線	Helical cutting groove	7	絕緣塗料	Insulation coat

外型尺寸 Dimensions

Rated Power (W)	Dimensions (mm)					Weight (g) (1000pcs)
	L	L1 Max.	D	Ød	ℓ	
1/4,S1/2,P1	6.0±0.5	7	2.4±0.3	0.6±0.05	28±2	210
1/2,S1,P2	9±0.5	11	3.0±0.5		28±3	285
1,S2,P3	12±1	15	4.0±0.5	0.8±0.05	38±3	728
2,S3,P5	16±1	18	5.5±0.5			1380
3,S5	25±2	28	8.5±0.5			3768

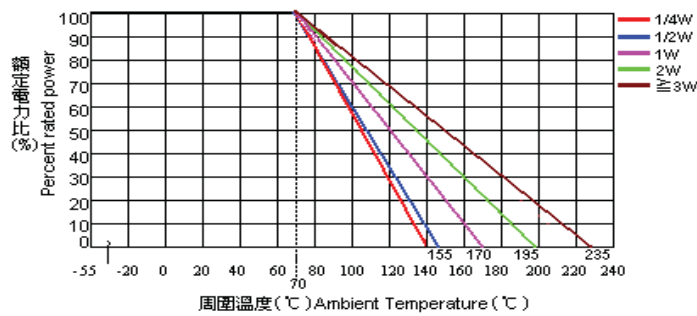
料號編碼 Type composition

例 Example

RS	U	14	J	R100	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	14:1/4W	F±1%	R100=0.1	See table below	熱鍍線 Heat plated
	S: Small	12:1/2W	G±2%	1R00=1		
	P: Super small	01:1W	J±5%	10R0=10		
		02:2W		1000=100		
		03:3W		1001=1K		
		05:5W		1002=10K		
				1003=100K		

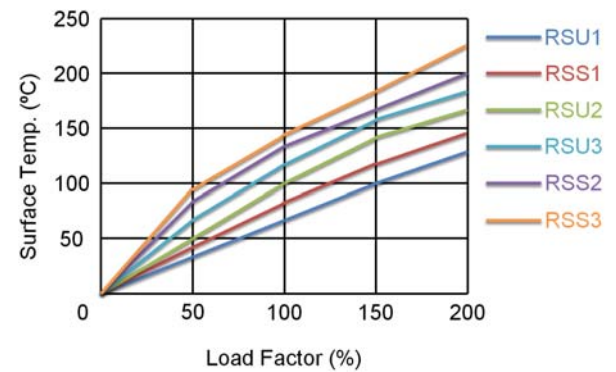
■ 額定溫度下降曲線圖 Derating curve

例 Example



■ 表面溫度上升

Surface Temperature Rise Vs. Loaded Power



■ 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			
	A52	A64	A73	FT	YT	L10	L12.5	L15	L20	L30	C12.5	C15	C20	C30	FA5	FB5	FC5	FD5	M12.5	M15	M20	D12.5	D15	D20	
1/4, S1/2,P1	○	—	—	○	—	○	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—
1/2,S1,P2	○	—	—	○	○	—	○	—	—	—	○	—	—	—	○	○	○	○	○	—	—	—	○	—	—
1,S2,P3	○	—	—	○	○	—	—	○	—	—	—	○	—	—	○	○	○	○	—	○	—	—	○	—	—
2,S3,P5	○	○	○	—	○	—	—	—	○	—	—	—	○	—	○	○	○	○	—	—	○	—	—	○	—
3,S5	—	—	—	—	—	—	—	—	—	○	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—

■ 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	±(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)
斷續過負荷 Intermittent overload	±(5%+0.1Ω)	Applicable more than 100Ω; Rated voltage × 3 1s ON / 25s OFF, 10,000 cycles
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	>1,000MΩ	500V 絕緣測試 1 分鐘 500V insulation test 1min. S1/2W 250V 絕緣測試 1 分鐘