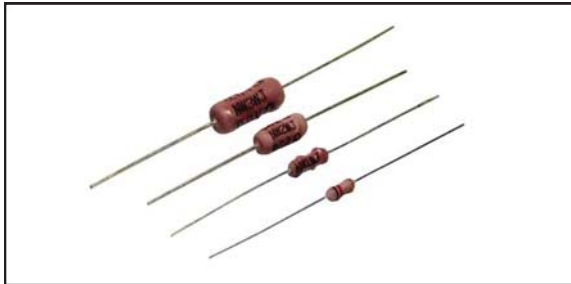


# NON INDUCTIVE RESISTOR

- NWU** 無感電阻器
- NMU** NON INDUCTIVE RESISTOR (Standard Type)
- NWS** 小型無感電阻器
- NMS** NON INDUCTIVE RESISTOR (Small Type)
- NWP** 超小型無感電阻器
- NMP** NON INDUCTIVE RESISTOR (Super Small Type)

- NVU** 無感精密電阻器
- NVU** NON INDUCTIVE PRECISION RESISTOR (Standard Type)
- NVS** 小型無感精密電阻器
- NVS** NON INDUCTIVE PRECISION RESISTOR (Small Type)
- NVP** 超小型無感精密電阻器
- NVP** NON INDUCTIVE PRECISION RESISTOR (Super Small Type)



- 塗料顏色 : 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 (S1/2W)
- 文字 : Alphanumeric (1/2W~7W)

## 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.
- ◎超低電感量 (1KHz : 1μH 以下)
- ◎ Low inductance value (1KHz : Under 1μH).
- ◎產品符合歐盟 RoHS 要求
- ◎ Products meet EU-RoHS.

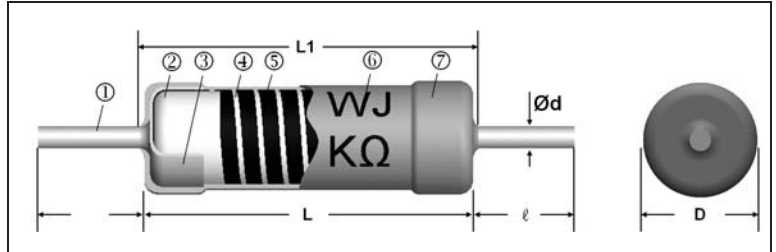
## 參考規格 Reference standards

- 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	耐電壓 Dielectric Withstanding Voltage DC	溫度係數 T.C.R.	包裝 Taping/Ammo pack (pcs)				
	NW (Wire)	NM (Film)	NV (Film)				A26	A52	A64	FT	YT
P1				750V	NW : 350V NM · NV : 500V	NW Type ≤ 1Ω : ± 500ppm/°C > 1Ω : ± 300ppm/°C	5000	2500	—	2000	—
1/2,S1,P2	0.1 ~ 10 0.05 ~ 22	2Ω ~ 12M	10Ω ~ 3G				—	2000	—	1000	1000
1,S2,P3	0.05 ~ 47			—	1000	1000	1000	1000			
2,S3,P5	0.05 ~ 100	2Ω ~ 14M	—	500	500	1000	1000				
3,S5	0.05 ~ 220 0.1 ~ 1K	2Ω ~ 1M 10 ~ 1M		1500V 10000V	NM · NV Type ≤ 300Ω : ± 350ppm/°C > 300Ω : ± 200ppm/°C	—	—	—	—	—	
7						—	—	—	—		
10						—	—	—	—		

## 結構圖 Construction



1	端子線	Lead wire	5	繞線	Wire wound/NW
2	瓷棒	Ceramic base	6	導電皮膜	Conductive film/NM · NV
3	鐵帽	Cap	7	標示	Marking or color code
4	切割線	Helical cutting groove		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	
P1	6±0.5	7	2.4±0.3	0.6±0.05	28±3	210
1/2,S1,P2	9±0.5	11	3.3±0.5		28±3	285
1,S2,P3	12±1	15	4.5±0.5	0.8±0.05	38±3	728
2,S3,P5	16±1	18	5.5±1		(S2W · S3W 36±3)	1380
3,S5	25±1	28	8.5±0.5		3768	
7	25±1	28	8.5±0.5		3768	
10	40±1	42	8.5±0.5		33±3	6434

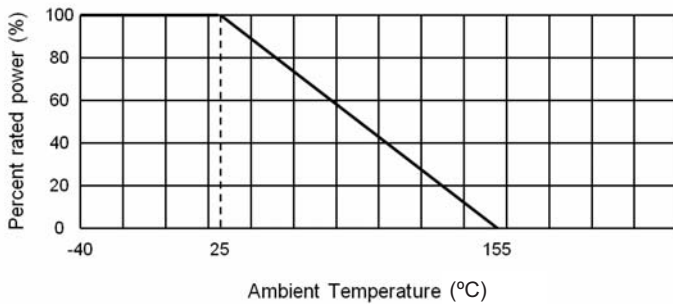
## 料號編碼 Type composition Example

NW	U	12	J	1000	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
NW	U: Standard	12:1/2W	G±2%	R100=0.1	See table	熱鍍線 Heat plated
NM	S: Small	01:1W	J±5%	1R00=1	below	
NV	P: Super small	02:2W		10R0=10		
		03:3W		1000=100		
		05:5W		1001=1K		
		A0:10W		1002=10K		

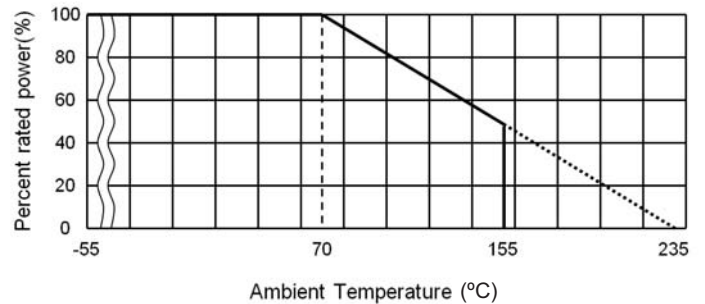
■ 額定溫度下降曲線圖 Derating curve

例 Example

NW Type



NM Type



■ 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	C30	FA5	FB5	FC5	FD5	M12.5	M15	M20	D12.5	D15	D20	D30	
P1	○	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2,S1,P2	-	○	-	○	○	-	○	-	-	○	-	-	-	○	○	○	○	○	-	-	○	-	-	-	-
1,S2,P3	-	○	○	○	○	-	-	○	-	-	○	-	-	○	○	○	○	-	○	-	-	○	-	-	-
2,S3,S5,P5	-	○	○	-	○	-	-	-	○	-	-	○	-	○	○	○	○	-	-	○	-	-	○	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	○	-	-	-	-	-	-	-	-	-	-	-	○
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

■ 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)
焊錫效果 Soldeability	95 % (min) coverage	Temp. of solder 245°C ± 5°C duration of immersion 3s±0.5s
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.
不燃性 Flameproof	無燃燒現象 No evidence of flaming or arcing	AC voltage of 2,4,8,16,32 times the power rating for 1min. (V ≤ 4 times max. working voltage)