

## POWER WIRE WOUND CHIP RESISTORS

### 電力型繞線封裝電阻器



#### Features

1. Flameproof UL94V0 molded package, resistant to heat, humidity & insulation.
2. Special design for automatic surface mounting.
3. Excellent mechanical strength & electrical stability.
4. Reducing assembly costs.

#### 特色

1. 不燃性樹脂封裝成型，具高耐溫，耐濕及絕緣特性。
2. 特殊設計，專供自動表面黏著作業。
3. 高安定性及高信賴性。
4. 降低裝配費用。

## ELECTRICAL AND MECHANICAL PERFORMANCE

### 電氣及機械特性

特性 Characteristics	規格值 Standards	試驗方法 Test Methods
阻值容許誤差 Resistance Tolerance	$\pm 5\%$ (J) or $\pm 1\%$ (F)	-
溫度係數 Resistance Temp. Coeff.	$\pm 200$ ppm / °C	-55°C ~ 200°C
額定負載 Power Rating Load	Surface temp. 275°C Max. 最高表面溫度 275°C, $\Delta R/R \leq \pm 1\%$	Rated voltage for 30 minutes 額定電壓 / 30分鐘
短時間過負載 Short Time Overload	$\pm 1\%$	5 times of rated wattage for 5 seconds. 5 倍額定功率 / 5秒
耐電壓 Dielectric Withstanding Voltage	No evidence of mechanical damage or insulation breakdown. 無機械性能損壞及絕緣擊穿現象	AC 500V for 1 minutes 施加 AC 500V 電壓 1 分鐘
絕緣電阻 Insulation Resistance	10,000MΩ	DC 500V megger
焊錫性 Solder-ability	Minimum 95% coverage 焊錫面積 $\geq 95\%$	235 $\pm$ 5°C for 2 seconds
浸錫耐熱性 Resistance to Soldering Heat	No evidence of mechanical damage. 無機械性能損壞現象, $\Delta R/R \leq \pm 1\%$	270 $\pm$ 5°C for 10 $\pm$ 1 seconds

## ENVIRONMENTAL CHARACTERISTICS

### 耐環境特性

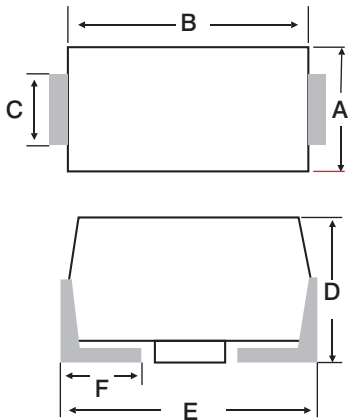
特性 Characteristics	規格值 Standards	試驗方法 Test Methods
溫度週率 Temp. Cycle	$\Delta R/R \leq \pm 1\%$	-55°C (30 min.) → Room Temp. (3 min.) → +200°C (30 min.) → Room Temp. (3 min.) / (5 cycles)
負載壽命 Load Life	$\Delta R/R \leq \pm 2\%$	Rated power load 90 minutes ON 30 minutes OFF 70°C 1000 hours
耐濕壽命 Moisture-proof Load Life	$\Delta R/R \leq \pm 2\%$	Rated power load 90 minutes ON 30 minutes OFF 40°C 95% RH 500 hours

※ 參考規格 Reference Standards  
IEC 60115-1  
JIS C 5201-1

## Dimensions

### 尺寸

Unit : mm



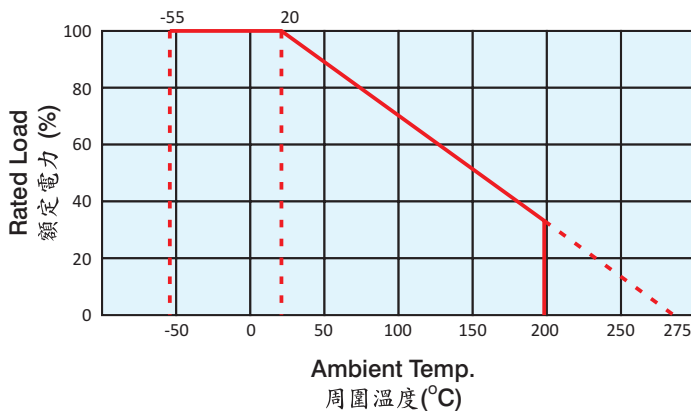
Rated Wattage	A $\pm$ 0.3	B $\pm$ 0.3	C $\pm$ 0.3	D $\pm$ 0.3	E Max.	F $\pm$ 0.3	Resistance Range( $\Omega$ )
2W	4.0	6.7	1.4	3.55	7.9	1.5	0.1~200
3W	5.5	10.5	1.7	5.0	12	2.3	0.1~300
5W	7.3	13.5	1.7	6.8	17	2.5	0.1~680

**Note:** Too low or too high ohmic values can be supplied only case by case.

## Derating Curve

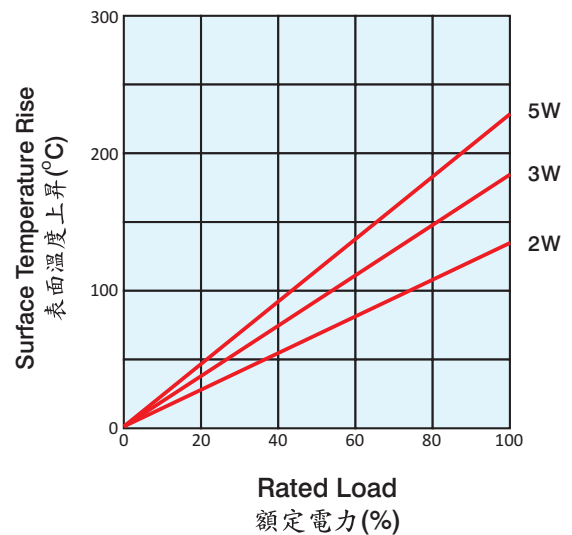
### 電力輕減曲線

For resistors operated in ambient temperatures above 20°C, power rating must be derated in accordance with the curve below.



## Surface Temperature Rise

### 表面溫度上昇曲線



## How to order

### 訂貨方式

It is composed by Type, Rated Wattage, Nominal Resistance and Tolerance.

SMW 2W 10 $\Omega$  J  
 a.      b.      c.      d.

- a. : Type(種類): Power Wire Wound Chip Resistors are called "SMW".
- b. : Rated Wattage(額定電力) : Shown by "W", such as 2W, 3W, 5W
- c. : Nominal Resistance(公稱電阻值) : 10 $\Omega$ .
- d. : Tolerance(容許誤差): F =  $\pm$ 1% , J =  $\pm$ 5% .