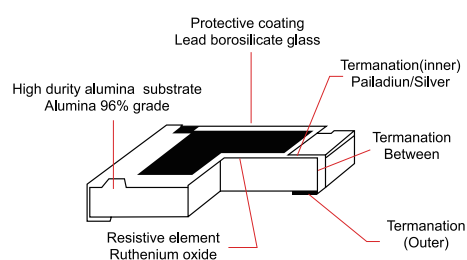


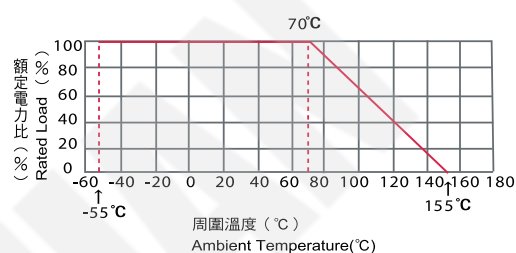
### 特點 Features

- ☐ 具有高工作電壓  
High working voltage
- ☐ 高穩定性及高可靠性  
High stability & reliability
- ☐ 適用無鉛回流焊及波峰焊制程  
Suit for reflow and wave soldering
- ☐ 符合 RoHS2.0 標準和 REACH 標準  
RoHS2.0 compliant and REACH compliant

### 結構圖 Construction



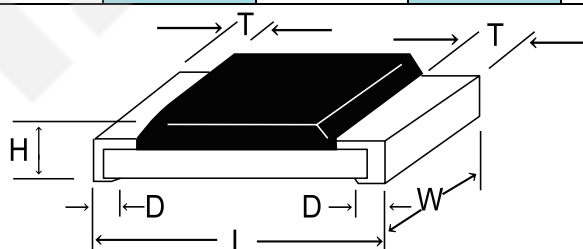
### 負載遞減曲線 Power Derating Curve



### 規格 Specifications

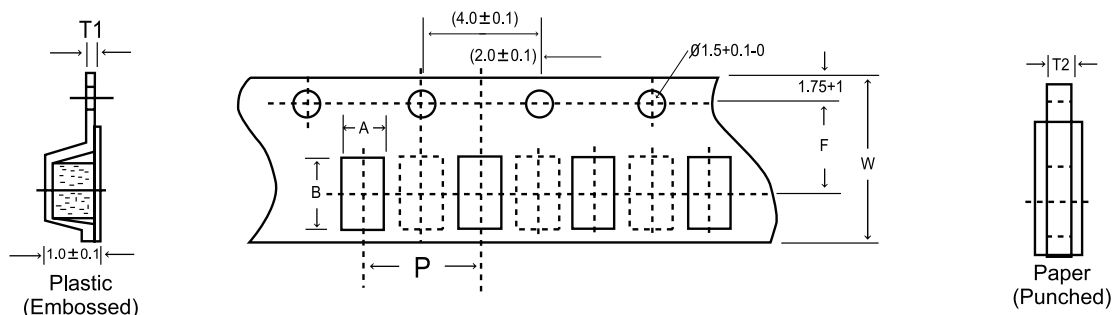
型式 Type	0805	1206	1210	2010	2512
定格電力 Rated Power	1/8W	1/4W	1/2W	3/4W	1W
最高使用電壓 Maximum Working Voltage	300V	500V	500V	500V	500V
最高過負荷電壓 Maximum Overload Voltage	600V	800V	800V	800V	1000V
耐電壓 Dielectric Withstanding Voltage	500V	500V	500V	500V	500V
阻值範圍 Resistance Range ±1% ±2% ±5%	1Ω~10MΩ	1Ω~51MΩ	1Ω~51MΩ	1Ω~51MΩ	1Ω~51MΩ

### 尺寸 Dimension



型式 Type	0805	1206	1210	2010	2512
L	2.0±0.15	3.1±0.15	3.1±0.1	5.0±0.15	6.35±0.2
W	1.25±0.15	1.6±0.15	2.6±0.15	2.5±0.15	3.2±0.15
H	0.55±0.1	0.55±0.1	0.55±0.1	0.55±0.1	0.55±0.1
T	0.4±0.2	0.45±0.2	0.5±0.2	0.6±0.2	0.6±0.2
D	0.4±0.2	0.5±0.20	0.5±0.20	0.6±0.2	0.6±0.2

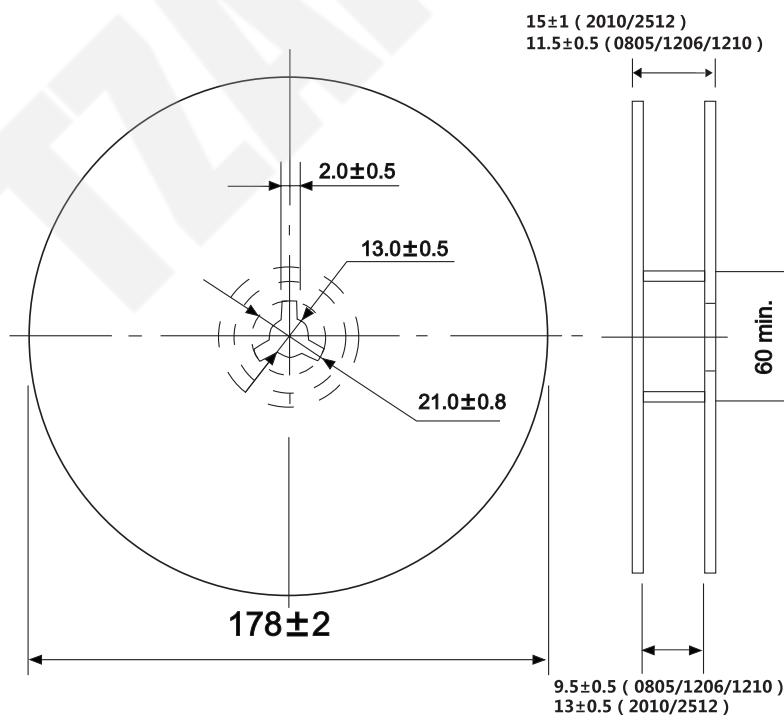
## 紙帶尺寸 Tape Specification



型式 Type	0805	1206	1210	2010	2512
A	1.65±0.2	2.0±0.2	2.8±0.2	2.9±0.2	3.6±0.2
B	2.4±0.2	3.6±0.2	3.5±0.2	5.5±0.2	6.9±0.2
W	8.0±0.2	8.0±0.2	8.0±0.2	12.0±0.1	12.0±0.1
F	3.5±0.05	3.5±0.05	3.5±0.05	5.5±0.5	5.5±0.5
T1	-----	-----	-----	0.2±0.05	0.2±0.05
T2	0.75±0.1	0.75±0.1	0.75±0.1	1.0±0.1	1.0±0.1
P	4.0±0.05	4.0±0.05	4.0±0.05	4.0±0.05	4.0±0.05

## 塑膠圓盤尺寸 Reel Dimensions

單位 Unit : mm



## 高壓晶片電阻器

### 品名構成 Product Identification

HSMD

種類

Type

0805

額定功率

Power Rating

0805	1206	1210
2010	2512	

10K

公稱電阻值

Nominal Resistance Value

E-24	E-48	E-96
Series	Series	Series

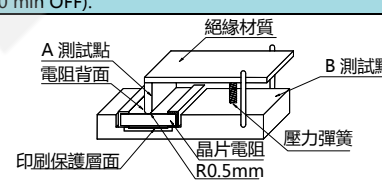
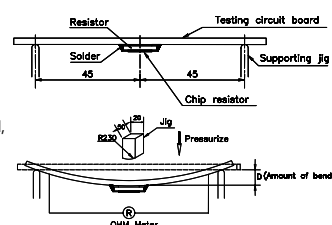
F

電阻值容許誤差

Resistance tolerance

F	G	J
±1%	±2%	±5%

### 特性 Characteristics

特性項目 Item	規格值 Performance	試驗方法(依據 JIS C 5201-1) Test Methods(Conform to JIS C 5201-1)
溫度係數 Temperature Coefficients	±1%, ±2%, ±5%: 1Ω ≤ R ≤ 10Ω: ±200PPM/°C ±1%, ±2%, ±5%: 10Ω < R ≤ 51MΩ: ±100PPM/°C	4.8 項參照 Comply with 4.8 $\frac{R_1 - R_0}{R_0(T_1 - T_0)} \times 10^6 (\text{PPM}/^\circ\text{C})$ R <sub>0</sub> : 室溫(T <sub>0</sub> )所測量之電阻值。 R <sub>1</sub> : 室溫+100°C(T <sub>1</sub> )後所測量之電阻值。 R <sub>0</sub> : Resistance value at room temp(T <sub>0</sub> ). R <sub>1</sub> : Resistance value at room temp plus 100°C(T <sub>1</sub> ).
短時間過負荷 Short Time Overload	±5%: ±(2%+0.1Ω) ±1%: ±(1%+0.05Ω) OR: 50mΩ 以下。OR: Less than 50mΩ. 不得有機械的損傷。 No evidence of mechanical damage.	4.13 項參照 Comply with 4.13 額定電壓 ×2.5 倍 5 秒， 不可超過最高過負荷電壓。 Rated voltage ×2.5 times 5s, But not to exceed maximum overload voltage.
耐濕負荷壽命 Load Life in Humidity	±1%: ±(1.0%+0.05Ω)以內。 ±5%: ±(3.0%+0.10Ω)以內。 OR: 50mΩ 以下。 Within1%: ±(1.0%+0.05Ω). Within5%: ±(3.0%+0.10Ω). OR: Less than 50mΩ.	4.24 項參照 Comply with 4.24 40±2°C, 濕度 90~95%, 1000 小時 定格電壓(90 分鐘 ON, 30 分鐘 OFF)。 40±2°C, 90 to 95%RH, 1000h Rated voltage (90 min ON, 30 min OFF).
絕緣電阻 Insulation Resistance	10 <sup>3</sup> MΩ 以上。 10 <sup>3</sup> MΩ or more.	4.6 項參照 Comply with 4.6 施加直流電壓 100V 60 秒。 Resistor shall be tested at DC 100V for 60 Seconds. 
耐電壓 Dielectric Withstanding Voltage	無電弧放電、燒損及絕緣破壞等異狀。 No evidence of flashover mechanical damage, arcing or insulation breakdown.	4.7 項參照 Comply with 4.7 施加個別規定之交流電壓 60 秒。 Resistor shall be tested at AC potential respectively for 60 seconds.
彎折性 Bending Strength	±(1%+0.05Ω)以內。 OR: 50mΩ 以下。 Within ±(1%+0.05Ω). OR: Less than 50mΩ.	6.1 項參照 Comply with 6.1 將晶片電阻焊於測試 PC 板上，在測試板中央 施力下壓，於負荷下量測阻值變化率。 下壓深度(D): 0805=5mm 1206&1210=3mm 2010&2512=2mm Let the chip resistor on the measure board, push inflection at the middle of measure board, and measure the resistance change between pre-and-post on loading. Push depth(D): 0805=5mm 1206&1210=3mm 2010&2512=2mm 
焊錫附著性 Solderability	電極至少 95%以上新錫覆蓋。 Electrode with new solder by 95% at least.	4.17 項參照 Comply with 4.17 焊錫溫度: 245±5°C 浸錫時間: 3~5 秒 Test temperature of solder: 245±5°C Dipping time in solder: 3~5 seconds
溫度循環 Temperature Cycle	±(1%+0.05Ω)以內。 OR: 50mΩ 以下。 不得有機械的損傷。 Within ±(1%+0.05Ω). OR: Less than 50mΩ. No evidence of mechanical damage.	4.19 項參照 Comply with 4.19 低溫側: -55°C/30 分, 室溫: 3~5 分鐘 高溫側: +155°C/30 分, 室溫: 3~5 分鐘 5 回 Low side: -55°C/30min, Room temp: 3 to 5min High side: +155°C/30min, Room temp: 3 to 5min 5cycles
負荷壽命 Load Life	±1%: ±(1.0%+0.05Ω)以內。 ±5%: ±(3.0%+0.10Ω)以內。 Within1%: ±(1.0%+0.05Ω). Within5%: ±(3.0%+0.10Ω).	4.25.1 項參照 Comply with 4.25.1 70±3°C, 1000 小時, 定格電壓(90 分鐘 ON, 30 分鐘 OFF)。 70±3°C, 1000h, Rated voltage (90 min ON, 30 min OFF).
焊錫耐熱性 Resistance to Soldering Heat	±(1%+0.05Ω)以內。 OR: 50mΩ 以下。 不得有機械的損傷。 Within ±(1%+0.05Ω). OR: Less than 50mΩ. No evidence of mechanical damage.	4.18 項參照 Comply with 4.18 260±5°C, 10±1.0 秒, 試驗後放置半小時。 260±5°C, 10±1.0 seconds, After test leave for 0.5h.