

1. Scope:

1.1 This specification is applicable of "ZERO" milli-ohm resistor (Jumper) products.

2. Explanation of Part Numbers:

	<u>CPM</u>	<u>1206</u>	-	<u>B</u>	<u>5</u>	<u>N</u>	<u>R000</u>
	↑	↑		↑	↑	↑	↑
Type	Size (inch)	Rated Power	Packaging*	Resistance Tolerance	Nominal Resistance		
Current Jumper Chip Resistor	1206	B = 0.5 W	1=1,000pcs	<0.20mΩ	R000 = Below 0.20mΩ		
	2512	2= 2.0 W	2=2,000pcs				
	2725	4= 4.0 W	4=4,000pcs				
	2817	3= 3.0W	5=5,000pcs				
	4527	5= 5.0W					

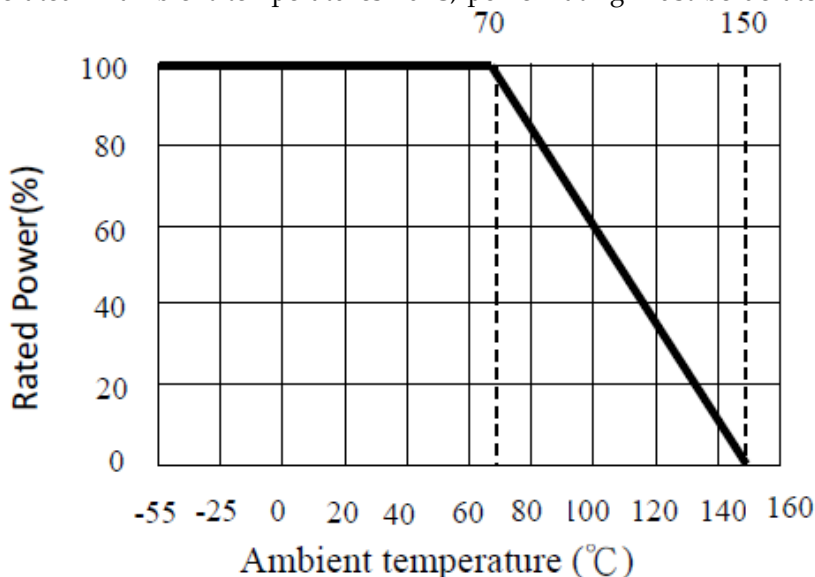
Remark: "*"The packaging quantity please refers to paragraph 8.

3. Product Specifications:

Type 類別	# of Terminals 電極端數目	Rating Power at 70C 額定功率在攝氏70度(W)	Max. Loading Current 最大負載電流(A)	Resistance (mΩ) 電阻值	Operating Temperature 操作溫度
CPM1206	2	0.50	50	0	-55~+150°C
CPM2512		2.0	100		
CPM2817		3.0	122		
CP M2725		4.0	140		
CPM4527		5.0	158		

4. Power Derating Curve:

For resistors operated in ambient temperatures 70°C, power rating must be derated in accordance with the curve below:



5. Rating Current:

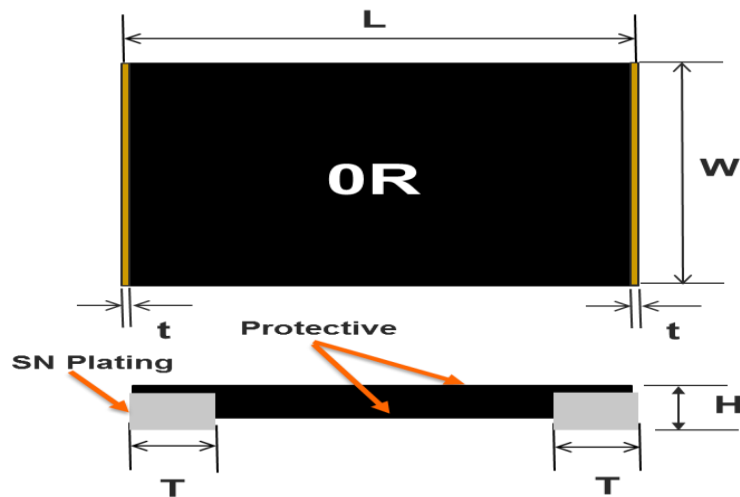
The following equation may be used to determine the DC (Direct Current) or AC (Alternating Current) currents (RMS, root mean square value) of normal rated power. However, if the result value exceeds the highest current of regulated standards, the highest normal rated power is to be used.

$$I = \sqrt{P/R}$$

Remark:

- I: Rated Current.
- P: Rated Power.
- R: Resistance.

6. Physical Dimensions and Marking:

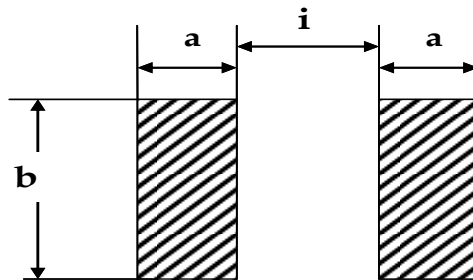


Type	Dimensions - in inches (millimeters)				
	L	W	H	T	t
CPM1206	0.126±0.010 (3.200±0.254)	0.065±0.010 (1.650±0.254)	0.026±0.010 (0.670±0.254)	0.020±0.010 (0.508±0.254)	0~0.080 (0~0.200)
CPM2512	0.250±0.010 (6.350±0.254)	0.120±0.010 (3.050±0.254)	0.026±0.010 (0.670±0.254)	0.043±0.010 (1.100±0.254)	0~0.080 (0~0.200)
CPM2725	0.268±0.010 (6.800±0.254)	0.250±0.010 (6.350±0.254)	0.030±0.010 (0.770±0.254)	0.071±0.010 (1.800±0.254)	0~0.080 (0~0.200)
CPM2817	0.280±0.010 (7.100±0.254)	0.165±0.010 (4.200±0.254)	0.030±0.010 (0.770±0.254)	0.059±0.010 (1.500±0.254)	0~0.080 (0~0.200)
CPM4527	0.445±0.010 (11.300±0.254)	0.260±0.020 (6.600±0.500)	0.030±0.010 (0.770±0.254)	0.079±0.010 (2.000±0.254)	0~0.080 (0~0.200)

7. Reliability Performance:

Test Items	Conditions of Test	Test Limits
Thermal Shock	-55°C to +150°C, 1,000cycles, 15min at each extreme (JIS_C5202-7.4)	≤ 0.2 mΩ
Short Time Overload	4 times rated power for 5secs (JIS-C5202-5.5)	≤ 0.2 mΩ
Load Life	1,000hrs@70 °C, 1.5hrs "ON", 0.5hrs "OFF" (JIS_C5202-7.10)	≤ 0.2 mΩ
Damp heat with load	1,000hrs@+85°C/85%RH, Bias 1.5hrs "ON", 0.5hrs "OFF"	≤ 0.2 mΩ
High Temperature Exposure	1,000hrs@+150°C (JIS_C5202-7.2)	≤ 0.2 mΩ
Solderability	245±5°C for 2±0.5secs	>95% coverage

8. Recommend Land Pattern:



Type	Dimensions - in inches (millimeters)		
	a	b	i
CPM1206	0.040 (1.00)	0.075 (1.90)	0.055 (1.40)
CPM2512	0.083 (2.11)	0.145 (3.68)	0.125 (3.18)
CPM2725	0.092 (2.34)	0.270 (6.86)	0.118 (3.00)
CPM2817	0.096 (2.45)	0.181 (4.60)	0.122 (3.11)
CPM4527	0.134 (3.40)	0.344 (8.74)	0.292 (6.43)

9. Packaging:

Model	Tape Width	Diameter	Piece/reel
CPM1206	8 mm/embossed plastic	178 mm/7"	5,000
CPM2512	12 mm/embossed plastic	178 mm/7"	4,000
CPM2725		178 mm/7"	2,000
CPM2817		178 mm/7"	1,000
CPM4527	24 mm/embossed plastic	178 mm/7"	1,000