



## THICK FILM CHIP RESISTORS NETWORKS - CRN164 晶片排阻

### Feature

1. High reliability and stability.
2. Reduced size of final equipment.
3. Lower assembly cost and higher surface mounted efficiency.
4. Higher component and equipment reliability.

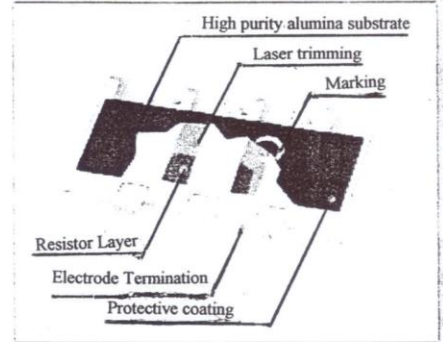
### Application

1. Consumer electrical equipment, PDA, Digital Camcorder.
2. EDP, Computer application.
3. Mobile phone Telecom.
4. DIMM.

### Description and Physical Dimensions

The resistors array is constructed in a high grade ceramic body (aluminum oxide). Internal metal electrodes are added at each end connected by a resistive paste that is applied to the top surface of the substrate. The composition of the paste is adjusted to give the approximate resistance required and the value is trimmed to within tolerance by laser cutting of this resistive layer.

The resistive layer is covered with a protective coat. Finally the two external end terminations are added for ease of soldering the outer layer of these end terminations is Lead-tin or Tin solder alloy. Marking code description is depended on component size and tolerance. Following figure shows the Construction of a Chip-R array.



### 特性

1. 性能極安定，具高度性賴性。
2. 體積小適用高精密電子產品。
3. 低裝配費用，高面積的鑲嵌效能。
4. 較精密的電子零件和高產品穩定性。

### 應用

1. 消費性電子產品，如個人數位助理(PDA)數位攝錄影機。
2. 電子資料處理器(EDP)電腦週邊產品。
3. 手機、電性。
4. 記憶體模組(DIMM)。

### SPECIFICATION

REQUIREMENTS	CHARACTERISTICS	TEST METHOD
Short time Over-load	$\pm(2\%+0.050)$	Rated Voltage $\times 2.5, 5$ seconds
Soldering Heat	$\pm(1\%+0.050)$	$260 \pm 5^\circ\text{C}, 10 \pm 1$ seconds
Temperature Cycling	$\pm(1\%+0.050)$	$125^\circ\text{C}(30\text{min}) \rightarrow \text{normal}(15\text{min}) \rightarrow -30^\circ\text{C}(30\text{min})$ normal(15min), 5cycles
Moisture Load-Life	$\pm(2\%+0.050)$	Rated Voltage, $40^\circ \pm 2^\circ\text{C}, 90 \sim 95\% \text{RH}, 1000^{+48}$ Hrs
Load-Life	$\pm(3\%+0.10)$	Rated Voltage, $70^\circ \pm 3^\circ\text{C}, 1000^{+48}$ Hrs

### RATINGS

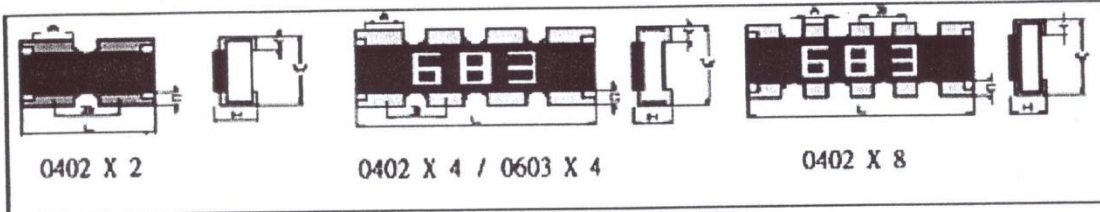
TYPE	POWER RATING AT $70^\circ\text{C}$	RATE CURRENT OF JUMPER(A)	MAX WORKING VOLTAGE(VW)	MAX OVER LOAD VOLTAGE(V0)	TCR (PPM/ $^\circ\text{C}$ )	RESISTANCE TOLERANCE (%)	RESISTANCE RANGE (Ω)	OPERATING TEMPERATURE ( $^\circ\text{C}$ )
0402*2	1/16W	1A	25V	50V	$\pm 200$	Jumper	50m 以下	$-55^\circ\text{C}$ $\sim +125^\circ\text{C}$
						5%	100~1M	
0402*4	1/16W	1A	25V	50V	$\pm 200$	Jumper	50m 以下	$-55^\circ\text{C}$ $\sim +125^\circ\text{C}$
						5%	100~1M	
0402*8	1/32W	0.5A	25V	50V	$\pm 200$	Jumper	50m 以下	$-55^\circ\text{C}$ $\sim +125^\circ\text{C}$
						5%	100~560K	
0603*4	1/16W	1A	50V	100V	$\pm 200$	Jumper	50m 以下	$-55^\circ\text{C}$ $\sim +125^\circ\text{C}$
						5%	100~1M	



# TECH-MEN ELECTRONICS COMPONENTS

Supply \* Sub Assemblies \* Taping/ Forming Components  
Co. Reg. No: 45730100K

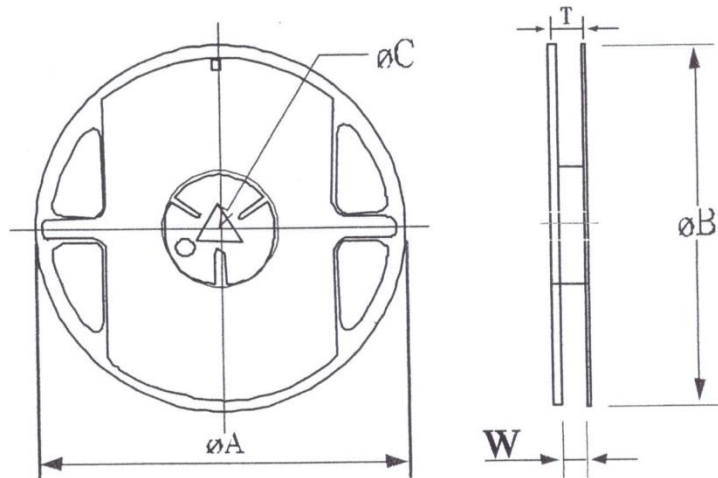
## Outline



## Dimension

Type	L(mm)	W(mm)	H(mm)	A(mm)	B(mm)	C(mm)	Y(mm)
0402×2	1.00±0.1	1.00±0.1	0.35±0.1	0.25±0.1	0.65±0.05	0.2±0.1	0.25±0.1
0402×4	2.00±0.1	1.00±0.1	0.45±0.1	0.3±0.1	0.5±0.05	0.22±0.15	0.22±0.15
0402×8	3.2±0.15	1.6±0.15	0.55±0.1	0.5±0.15	0.8±0.05	0.3±0.15	0.3±0.15
0603×4	3.2±0.15	1.6±0.15	0.55±0.15	0.35±0.1	0.64±0.05	0.4±0.15	0.4±0.15

## Real Specification



Unit : mm

Style	Packing	Tape width	Reel Diameter	? A	? B	? C	W	T
0402×2 0402×4	Paper	8mm	7 inch	180 <sup>+0/-3</sup>	60 <sup>+0/-0</sup>	13.0±0.2	9.0±0.3	11.4±1
0402×8 0603×4			10 inch	254±1	100±1	13.0±0.2	9.5±0.5	13.5±1