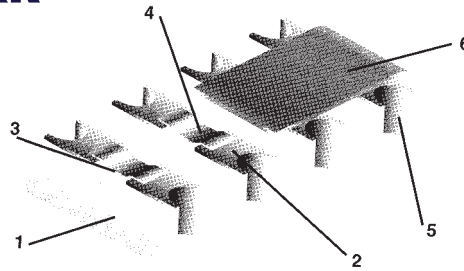


THICK FILM R-NETWORK

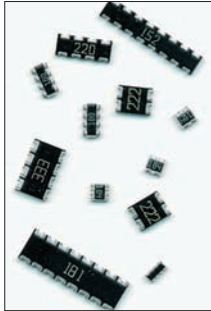
CONCAVE TERMINATIONS

CN



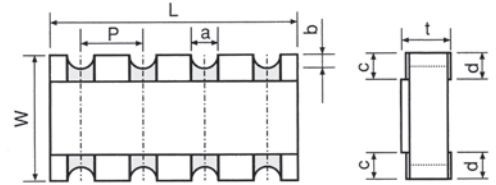
STRUCTURE

- 1 Ceramic substrate
- 2 Inner electrode
- 3 RuO₂ resistive film
- 4 Inner glass passivation
- 5 Outer electrode
- 6 Protective coating



IDENTIFICATION

TYPE	COATING COLOR	MARKING
CN	Black	White, 3 digits



Products with Pb-free terminations meet EU-RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

CN	2A	4	T	TE	101	J	Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS
PRODUCT CODE	STYLE 1J, 2A, 2B	NO. OF RESISTORS 2, 4, 8	TERMINATION SURFACE MATERIAL T: Sn (L: Sn/Pb)	TAPING* TD, TE, BK	NOMINAL RESISTANCE F: 4 digits G, J: 3 digits	TOLERANCE F: (±1%) G: (±2%) J: (±5%)	

*Please see "PACKAGING"

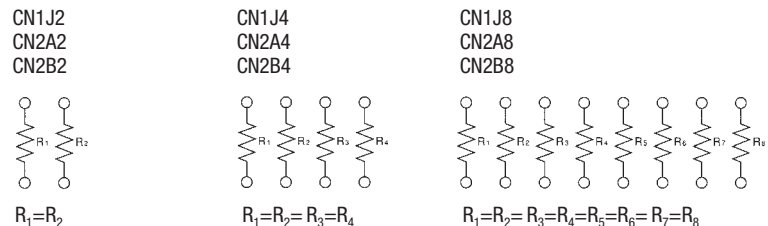
DIMENSIONS (mm)

SIZE	TYPE	L ±0.2	W ±0.2	c	d ±0.1	t	a (top)	a (bottom)	b ±0.1	P (ref.)
0606 (2 x 0603)	CN 1J 2	1.6								
1206 (4 x 0603)	CN 1J 4	3.2	1.6	0.3 ± 0.2	0.40		0.5 ± 0.1	0.4 ± 0.15		(0.80)
2506 (8 x 0603)	CN 1J 8	6.4								
1008 (2 x 0805)	CN 2A 2	2.54								
2008 (4 x 0805)	CN 2A 4	5.08	2.0	0.4 ± 0.2		0.6 ± 0.1			0.15	
4008 (8 x 0805)	CN 2A 8	10.16								
1012 (2 x 1206)	CN 2B 2	2.54			0.55					
2012 (4 x 1206)	CN 2B 4	5.08	3.2	0.5 ± 0.3			0.8 ± 0.1	0.75 ± 0.15		(1.27)
4012 (8 x 1206)	CN 2B 8	10.16								

FEATURES

- 2, 4 or 8 isolated resistor elements included in one array
- Less board space than individual chip resistors
- High cost reduction efficiency by eliminating mounter operations
- High self-alignment effect in reflow soldering process
- Suitable for image recognition systems due to square corner design
- Precision type ±1% is available
- Meets or exceeds IEC 60115-1, JIS C 5201-1
- Rated ambient temperature: +70°C
- Operating temperature range: -55°C ... +125°C (+155°C on request)
- Suitable for reflow and wave soldering

CIRCUIT CONSTRUCTION



RATING

SIZE	TYPE	T.C.R. (ppm/K)*	POWER RATING (per element)**	MAX. WORKING VOLTAGE	MAX. OVERLOAD VOLTAGE	RESISTANCE RANGE		
						F (±1%) E24 • E96	G (±2%) E24	J (±5%) E24
0606 (2 x 0603)	CN 1J 2	± 200: R ≥ 10 Ω ± 400: R < 10 Ω	0.063 W	50 V	100 V	10 Ω ... 1 MΩ	10 Ω ... 1 MΩ	10 Ω ... 1 MΩ
1206 (4 x 0603)	CN 1J 4*							1 Ω ... 1 MΩ
2506 (8 x 0603)	CN 1J 8							10 Ω ... 1 MΩ
1008 (2 x 0805)	CN 2A 2	± 200: R ≥ 10 Ω ± 400: R < 10 Ω	0.1 W	100 V	200 V	10 Ω ... 1 MΩ	10 Ω ... 1 MΩ	10 Ω ... 1 MΩ
2008 (4 x 0805)	CN 2A 4							10 Ω ... 1 MΩ
4008 (8 x 0805)	CN 2A 8							10 Ω ... 1 MΩ
1012 (2 x 1206)	CN 2B 2							10 Ω ... 1 MΩ
2012 (4 x 1206)	CN 2B 4							10 Ω ... 1 MΩ
4012 (8 x 1206)	CN 2B 8	10 Ω ... 1 MΩ						

* CN1J4 (±1%) has TCR ±100ppm/K

** For resistors operated at an ambient temperature of +70°C or above, the power rating shall be derated.

Please note that network resistors generate higher heat rather than single flat chip resistors even under rated power output.

A few cross talks will occur in network resistors. In case of using them for a high frequency circuit, please design circuits taking the effect by the cross talks into consideration.

Rated voltage = √ Power rating x resistance value or max. working voltage, whichever is lower.

Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment. Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order or use.