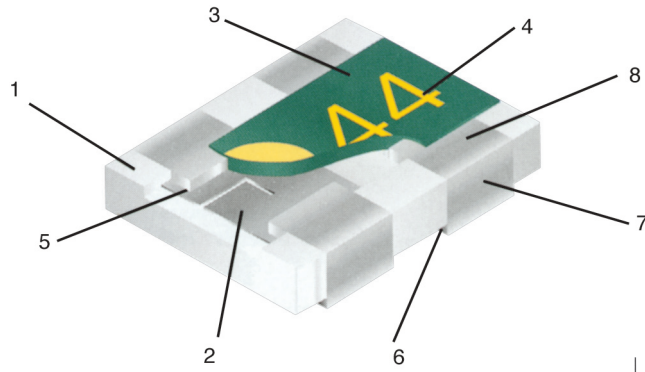
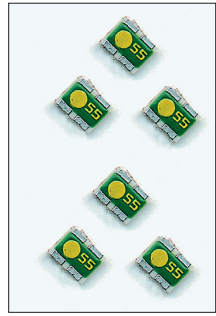


**THIN FILM
R-NETWORKS
PAIR RESISTORS
CNN**



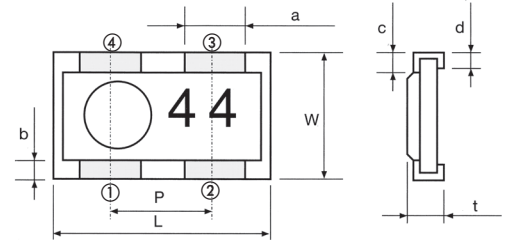
STRUCTURE

- 1 Ceramic substrate
- 2 Metal film (trimmed)
- 3 Epoxy resin
- 4 Marking
- 5 Inner top termination
- 6 Inner bottom termination
- 7 Outer End termination
- 8 Solder plating



IDENTIFICATION

PRODUCT CODE	COATING COLOR	MARKING
CNN 2A	Green	Yellow, 2 digits + Pin 1 indicator



Products with Pb-free terminations meet EU-RoHS and China-RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

CNN	2A	2	T	TE	103/103	B	A
PRODUCT CODE CNN	STYLE	NUMBER OF ELEMENTS	TERMINATION SURFACE MATERIAL T: Sn (L: Sn/Pb)	TAPING* TE, BK *Please see "PACKAGING"	NOMINAL RESISTANCE 3 digits	ABSOLUTE RESISTANCE TOLERANCE B: (±0.1%) C: (±0.25%)	RATIO RESISTANCE TOLERANCE A: (0.05%) B: (0.1%)

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS

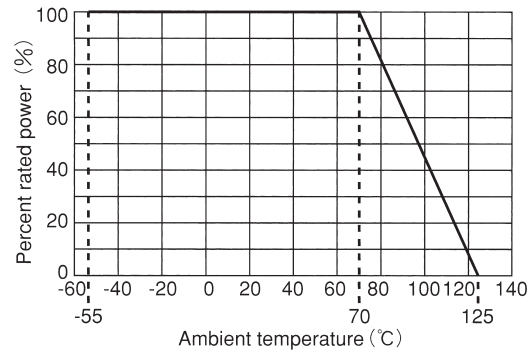
DIMENSIONS (mm)

TYPE	L	W	t	P	a	c	d	b
CNN	2.54 ± 0.2	2.0 ± 0.2	0.5 ± 0.1	(1.27)	0.7 ± 0.15	0.4 ± 0.3	0.3 ± 0.2	0.4 ± 0.3

FEATURES

- Thin film chip resistor network
- Pair resistor for high precision op-amplifier
- Excellent in relative T.C.R. and relative accuracy
- Any pairs between 1 kΩ and 100 kΩ on request
- Meets or exceeds IEC 60115-1, JIS C 5201-1
- Operating temperature range: - 55° C ... + 125° C
- Rated ambient temperature: + 70° C
- Suitable for reflow soldering

DERATING CURVE



RATING

SIZE	TYPE	T.C.R. (ppm/K)		POWER RATING (per element)*	RATED AMBIENT TEMP.	MAX. WORKING VOLTAGE	MAX. OVERLOAD VOLTAGE	RESISTANCE VALUES	RESISTANCE TOLERANCE	
		ABSOLUTE	RELATIVE TRACKING						ABSOLUTE	RATIO (TRACKING)
1008 (2 x 0805)	CNN 2A 2	F (± 25)	5	0.05 W	+70° C	50 V	100 V	1 kΩ, 10 kΩ, 100 kΩ	B (± 0.1%) C (± 0.25%)	A (0.05%) B (0.1%)

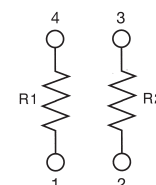
* For resistors operated at an higher ambient temperature than rated, the power should derated in accordance with the above 'DERATING CURVE'.
Rated voltage = √Power rating x resistance value or max. working voltage, whichever is lower.

RESISTANCE COMBINATIONS AND MARKING

	CNN	CNN	CNN	CNN	CNN	CNN
Value of resistor 1	1 kΩ	1 kΩ	1 kΩ	10 kΩ	10 kΩ	100 kΩ
Value of resistor 2	1 kΩ	10 kΩ	100 kΩ	10 kΩ	100 kΩ	100 kΩ
First marking number	3	3	3	4	4	5
Second marking number	3	4	5	4	5	5

CNN: Custom products of any pairs between 1kΩ and 100 kΩ are available on request.

CIRCUIT CONSTRUCTION



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.