THICK FILM CHIP RESISTOR ARRAYS

- CN SERIES -

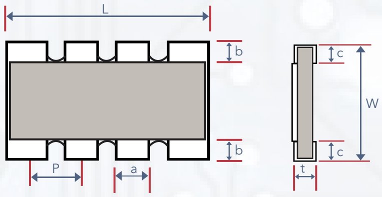
FEATURES

- Small size and light weight, high density
- Reduction of assembly costs and matching with placement machines (automatic lacement)
- Powers per Element: 62.5mW or 1/16Watt
- Reliability, high quality
- Suitable for IR reflow soldering
- Convex

APPLICATIONS

- Entertainment
- Computer & Related Products
- Communication Equipment
- Power Equipment
- Measuring Equipment

DIMENSIONS



UNIT=mm

TYPE	L	W	t	P	a	b	c
CN22	1.0±0.1	1.0±0.1	0.35±0.1	0.65±0.05	0.3±0.1	0.15±0.1	0.25±0.2
CN24	2.0±0.1	1.0±0.1	0.4±0.2	0.5±0.05	0.3±0.1	0.15±0.1	0.25±0.2
CN34	3.2±0.1	1.6±0.15	0.55±0.1	0.8±0.5	0.45±0.1	0.3±0.2	0.3±0.2

PART NUMBER GUIDE

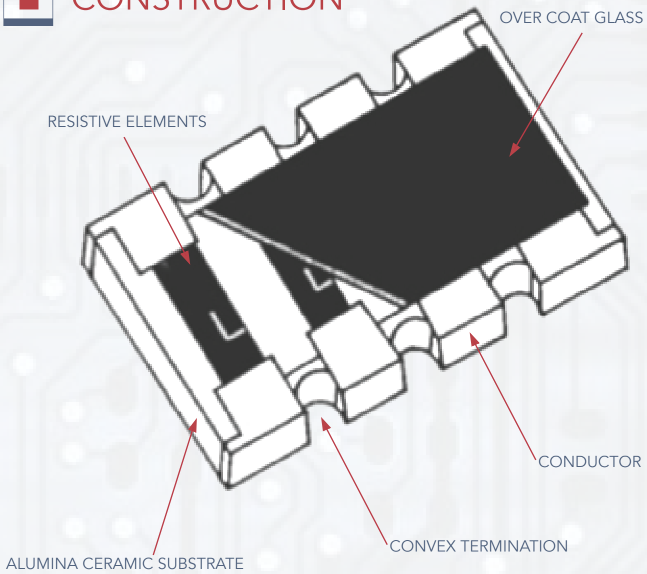
CN	34	F	1001	CT
PRODUCT TYPE	SERIES	RESISTANCE TOLERANCE	RESISTANCE	PACKAGING
	22 - 0402X2 4P2R 24 - 0402X4 8P4R 34 - 0603X4 8P4R	F: ±1% J: ±5%	5% = 3 Digit 1st 2 significant, 3rd is multiplier by (10x) 1% = 4 Digit 1st 3 significant 4th is multiplier by (10x)	CT: Tape and Reel

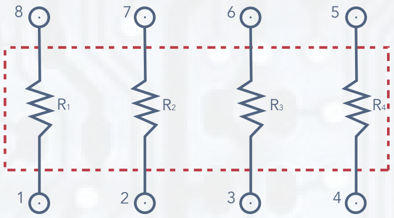
RATED VOLTAGE

The value of rated voltage shall be determined from formula (1).

$E = \sqrt{P} \times R$ ....(1)
E = Rated Voltage (V)P - Power Rating (W)
R = Nominal Resistance (Ω)

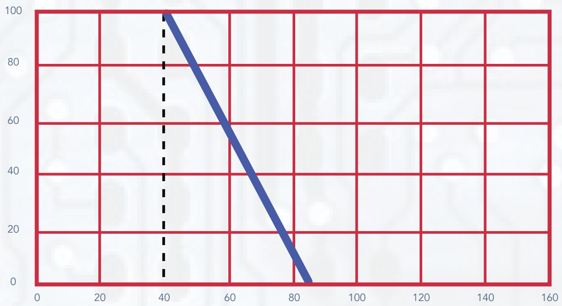
CONSTRUCTION



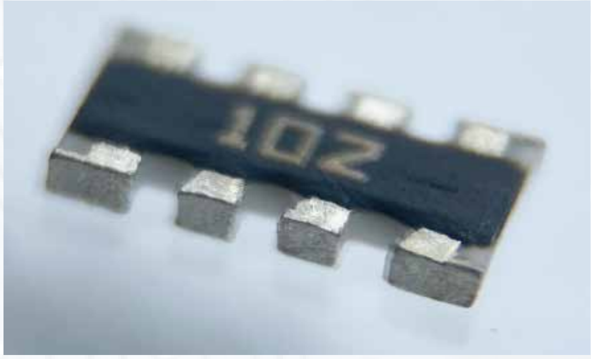


$R_1 = R_2 = R_3 = R_4$

DERATIVE CURVE



The reistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with curve above.



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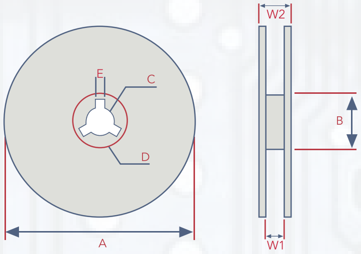
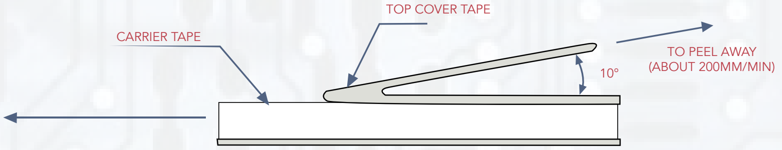
FEATURES

ITEM	SPECIFICATIONS	TEST METHODS
Temperature Coefficient	TCR: ±200ppm	Inspection Temp. Cold: +25°C~-55°C Hot: +25°C~+125°C
Short Time Overload	±(2%+0.05Ω)	1. Apply 2.5 x rated voltage for 5 sec. 2. Wait 30 minutes 3. Measure resistance value
Load Life	±(3%+0.05Ω)	1. Dwell in chamber at 70±2°C for ON:90 min. at rated voltage; then off: 30 min. 2. Perform 1,000 hours cyclically
Load Life in Humidity	±(3%+0.05Ω)	1. Dwell in humidity chamber at 40±2°C and 95% RH for ON:90 min. at rated voltage; then off: 30 min. 2. Perform 1,000 hours cyclically
Temperature Cycling	±(1%+0.05Ω)	1. -55±3°C, make 5 cycles 2. Released 1 hour in room temp., then measure value.
Effect of Soldering	±(2.5%+0.05Ω) - Non-damage by machinery	1. Immersed in molten solder at 270±5°C for 10±.01 sec. 2. Released 1 hour in room temp., then measure value.
Solderability	95% coverage min.	1. Immersed in rosin solution for 5~10 seconds. 2. Re-immersed in solder pot at 230±5°C for 3±0.5 sec
Intermittent Overload	±(5%+0.1Ω)	1. perform 10,000 voltage cycles as follows: ON (2.5 x rated voltage or current) 1 sec. and OFF 25 sec. 2. Released 30 min without loading 3. Measure resistance
Dielectric Withstanding Voltage	No evidence of mechanical damage	Apply 300VAC for 1 second
Insulation Resistance	10 Ω min	Apply 100VDC

PACKAGING

REEL SPECIFICATIONS & PACKAGING QUANTITY





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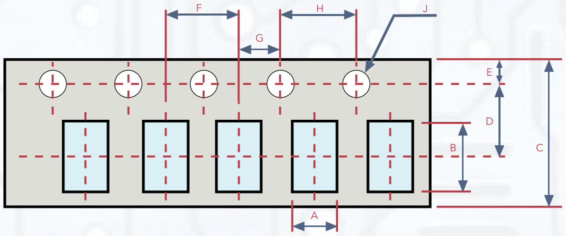
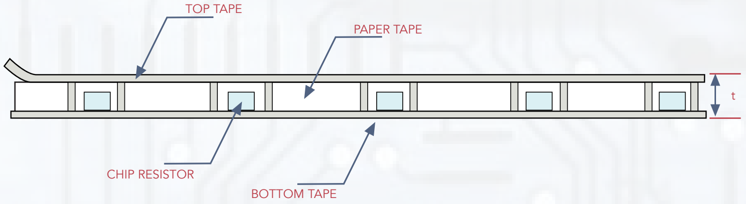
TYPE	A	B	C	D	E	W1	W2
CN22	Ø178±2.0	Ø80±2.0	Ø13±0.5	Ø21.0	2.0±0.5	9.0±1.0	11.4±2.0
CN24	Ø178±2.0	Ø80±2.0	Ø13±0.5	Ø21.0	2.0±0.5	10.0±1.0	12.5±1.0
CN34	Ø178±2.0	Ø80±2.0	Ø13±0.5	Ø21.0	2.0±0.5	10.0±1.0	12.5±1.0

The top fixed tape for each carrier shall have an adhesion peel strength of 10 to 50G, measure method is shown above to peel away.

TAPING SPECIFICATION





UNIT=mm

TYPE		A	B	C	D	E	F	G	H	J	t
CN22	10000	2.0±0.15	2.4±0.2	8.0±0.2	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	.5±0.1/-.0	.84±0.01
CN24	10000	2.0±0.15	2.4±0.2	8.0±0.2	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	.5±0.1/-.0	.84±0.01
CN34	5000	2.0±0.2	3.6±0.2	8.0±0.1	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	1.5±0.1	1.0

RoHS

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