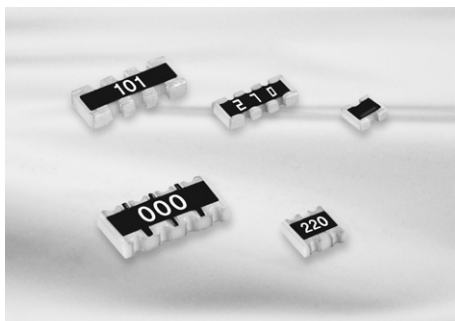


Array



Feature

- Reducing SMD surface area (40% reduced).
- Reducing SMD costs (75% reduced).
- Both flow and reflow soldering are applicable.
- Convex & concave type.

The product of lead-free terminal is RoHS compliant.
PhO(lead oxide) is included in the glass of our product which is prescribed on RoHS appendix as an exception.

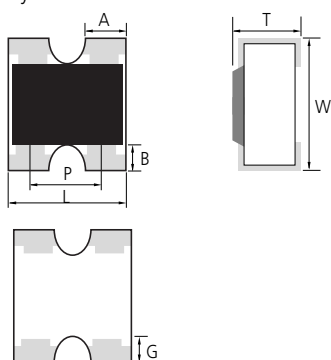
Application

- For semiconductor devices.
- For computers, digital circuits.

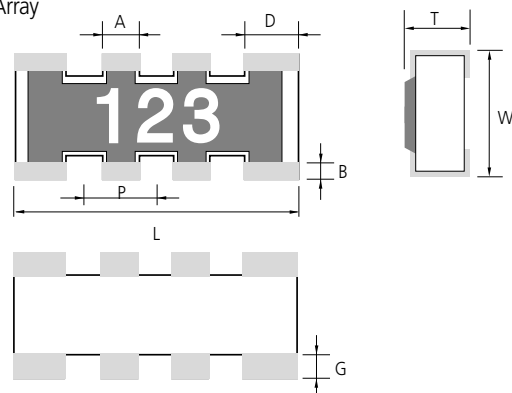
Structure and Dimensions

(1) CONVEX TERMINAL TYPE

• 2 Array



• 4 Array

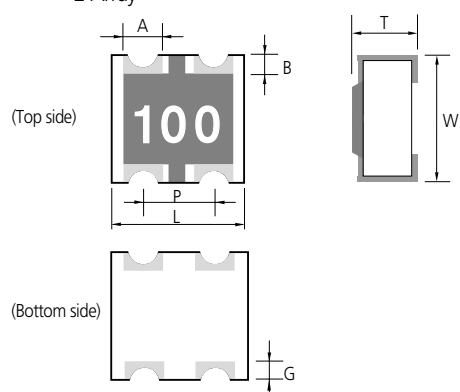


(UNIT: mm)

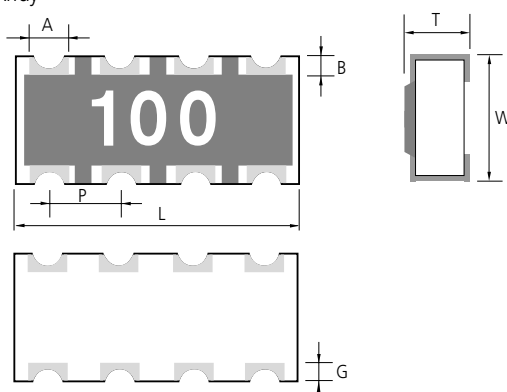
Type	L	W	T	A	D	B	G	P	Average Weight
RP102P	1.00±0.10	1.00±0.10	0.35±0.10	0.33±0.05	-	0.20±0.10	0.25±0.10	0.65±0.10	1.1mg
RP104P	2.00±0.10	1.00±0.10	0.35±0.10	0.30±0.15	0.40±0.15	0.15±0.10	0.25±0.15	0.50±0.15	2.2mg
RP164P	3.20±0.10	1.60±0.10	0.50±0.10	0.40±0.15	0.60±0.15	0.30±0.15	0.30±0.15	0.80±0.15	8.9mg

(2) CONCAVE TERMINAL TYPE

• 2 Array



• 4 Array



(UNIT: mm)

Type	L	W	T	A	B	G	P	Unit Weight
RN102P	1.00±0.10	1.00±0.10	0.35±0.10	0.30±0.10	0.15±0.10	0.25±0.15	0.5±0.10	1.2mg
RN104P	2.00±0.10	1.00±0.10	0.40±0.10	0.30±0.10	0.15±0.10	0.25±0.15	0.5±0.10	2.8mg
RN162P	1.60±0.10	1.60±0.10	0.60±0.10	0.45±0.10	0.30±0.15	0.40±0.15	0.80±0.10	4.7mg
RN164P	3.20±0.10	1.60±0.10	0.60±0.10	0.45±0.10	0.30±0.15	0.40±0.15	0.80±0.10	9.9mg

Parts Numbering System

- The part number system shall be in the following format

RN Code Designation	16 Dimension	4P Resistors	J Tolerance	100 Resistance Value	FS Packaging Code
RP: Convex type array RN: Concave type array	10: 1005 16: 1608	2P: 2 Pieces 4P: 4 Pieces	J: $\pm 5\%$ * Jumper: 'J'	3 digit coding system (IEC coding system) E-24 series	CS : Tape Packaging 7" ES : Tape Packaging 10" FS : Tape Packaging 13" AS : Tape Packaging 13"

Specification

Type	Power Rating (W)	Working Voltage (MAX)	Overload Voltage (MAX)	TCR (ppm/°C)	Resistance Range (Ω)	Rated Ambient Temperature	Rated Working Temperature
102P, 104P 162P, 164P	1/16	25(V) 50(V)	50(V) 100(V)	$\pm 250\text{ppm}$ $\pm 200\text{ppm}$	1 Ω ~1M Ω	70°C	-55°C ~+125°C

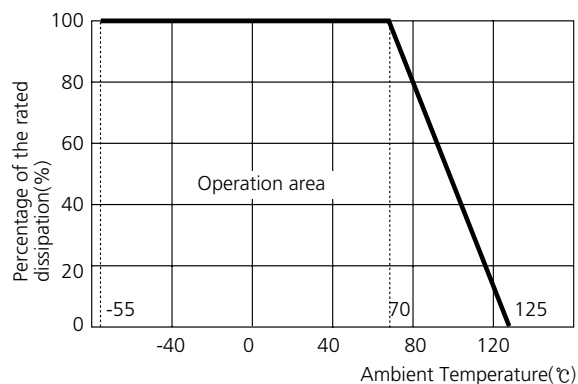
- Rated voltage (V) = $\sqrt{\text{Rated power(W)} \times \text{Normal resistance value (R)}}$
Rated voltage should be lower than (MAX) working voltage.

Power Derating Curve

The rated power is the maximum continuous loading power at 70°C ambient temperature.

For ambient temperature above 70°C, the loading power follows the below power derating curve.

(The load current shall be derated according to Derating curve in case of the 'Jumper')

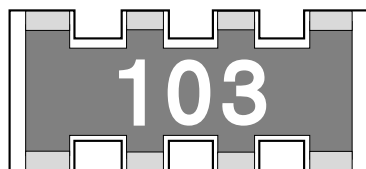


Jumper Resistors

Type	Resistance	Current Rating	Rated Ambient Temperature	Rated Working Temperature
102P, 104P 162P, 164P	50m Ω Max.	1.0(A)	70°C	-55°C ~+125°C

Marking

- 3 digits indication(E-24 series)
 - Left 2 digits represent significant figures.
 - Last 1 digit represents exponential number of 10.
 - Example: 103
 - Left 2 digit: 10
 - Last 1 digits: 3
 - $103 = 10 \times 10^3 = 10000 \Omega = 10\text{k}\Omega$



* Jumper chip is printed as "000".

- RP102P, RN102P, RN104P type : No marking.

Operation
Notes

Example of Land
Pattern Design

Recommended
Soldering Conditions

General
Purpose

Precision

Low Ohms

Array

Attenuator

Characteristics
Performance

Packaging

Standard
Resistance Value