

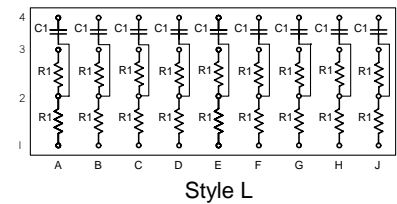
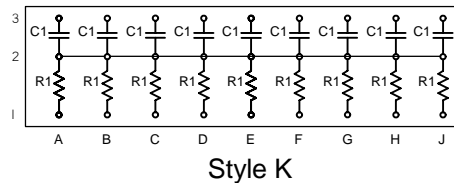
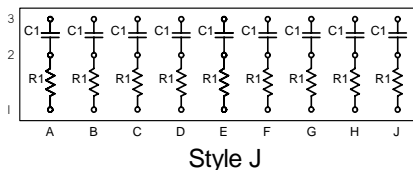
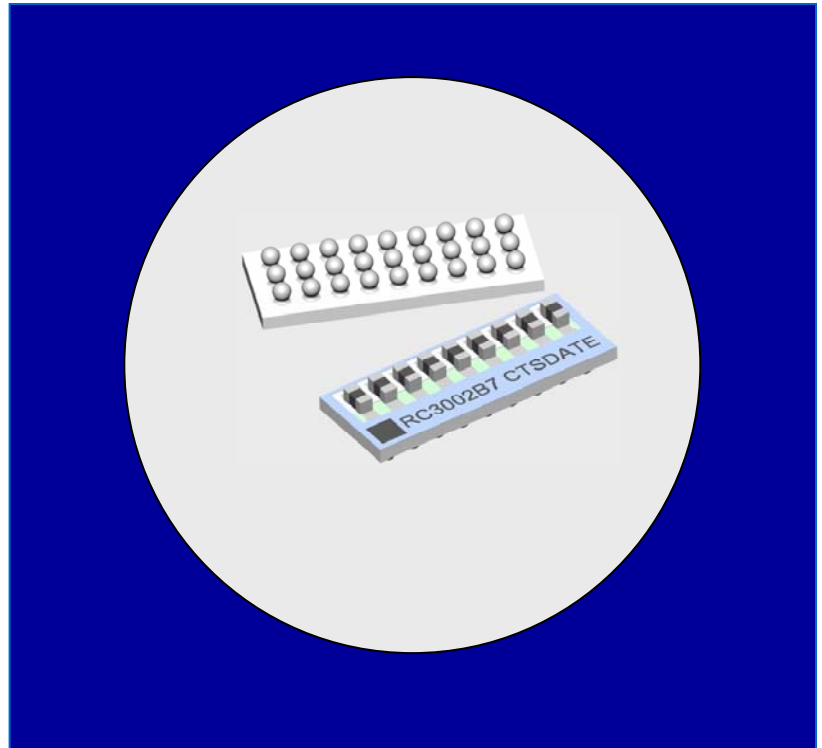
Features

- Integrated Resistor and Capacitor Network
- Excellent high frequency performance
- Slim BGA Package
- 1% Resistor Tolerance
- Dense packaging solution
- Significantly reduces component placements

Description

This Resistor/Capacitor terminator network provides high performance termination.

Designed with a ceramic substrate, this device virtually eliminates channel capacitance, a primary cause of reduced system performance. In addition, the BGA package eases routing design, saving the designer many hours of printed circuit layout.

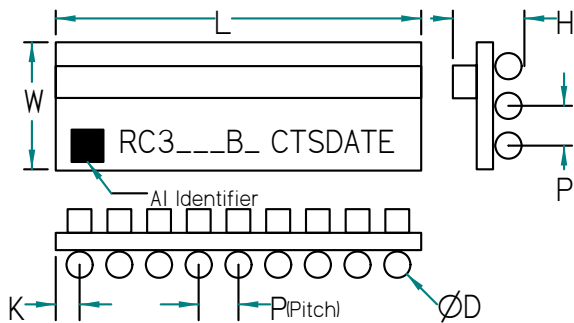


Ordering Information

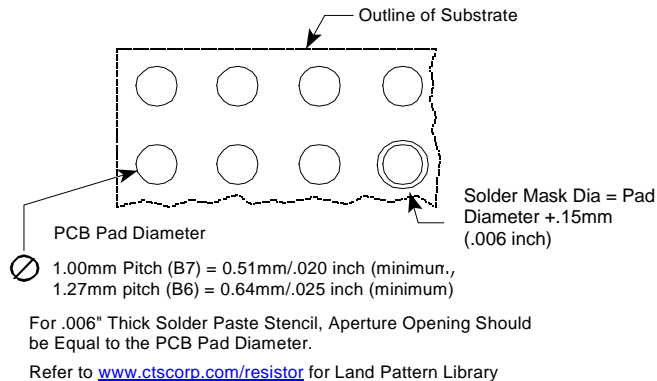
| 1.27mm Pitch Part Number | 1.00mm Pitch Part Number | Style | Ball Grid Array Size | R1 Ω | Tolerance R1 | C1 | Cap Tolerance | Dielectric | DF |
|--------------------------|--------------------------|-------|----------------------|------|--------------|-------|---------------|------------|----------|
| RC3002B6 | RC3002B7 | K | 3 x 9 | 50 | ±1% | 0.1uf | ±10% | X5R | 5% max |
| RC3005B6 | | L | 4 x 9 | 50 | ±1% | 0.1uf | ±10% | X5R | 5% max |
| RC3007B6 | | J | 3 x 9 | 50 | ±1% | 100pf | ±10% | NPO | 2.5% max |
| RC3008B6 | | J | 3 x 9 | 50 | ±1% | 33pf | ±10% | NPO | 2.5% max |
| RC3010B6 | | L | 4 x 9 | 100 | ±1% | 0.1uf | ±10% | X5R | 5% max |

(Tape and reel packaging information is shown on page 2)

Mechanical Diagrams



Recommended Land Pattern



| 1.27mm Pitch | | L | W | H | P | D | K | Coplanarity |
|----------------------|------|------------|-----------|----------|-----------|-----------|-----------|-------------|
| RC3002B6 | mm | 11.43±0.15 | 3.81±0.15 | 2.03 max | 1.27±0.25 | 0.76±0.05 | 1.02±0.25 | 0.15 |
| | inch | .450±.006 | .150±.006 | .080 max | .050±.010 | .030±.002 | .043±.010 | .006 |
| RC3005B6 RC3010B6 | mm | 11.43±0.15 | 5.08±0.15 | 2.03 max | 1.27±0.25 | 0.76±0.05 | 1.02±0.25 | 0.15 |
| | inch | .450±.006 | .200±.006 | .080 max | .050±.010 | .030±.002 | .040±.010 | .006 |
| RC3007B6 RC3008B6 | mm | 11.43±0.15 | 3.81±0.15 | 2.03 max | 1.27±0.25 | 0.76±0.05 | 1.02±0.25 | 0.15 |
| | inch | .450±.006 | .150±.006 | .080 max | .050±.010 | .030±.002 | .040±.010 | .006 |
| 1.0mm Pitch | | L | W | H | P | D | K | Coplanarity |
| RC3002B7 | mm | 9.64±0.15 | 3.64±0.15 | 1.83 max | 1.00±0.25 | 0.64±0.05 | 0.82±0.25 | 0.15 |
| | inch | .380±.006 | .143±.006 | .072 max | .039±.010 | .025±.002 | .033±.010 | .006 |

Electrical Specifications

| | |
|---------------------------------|---|
| Resistor Tolerance: | ± 1.0% |
| TCR | ± 200ppm/°C |
| Operating Temperature Range | -55°C to +125°C (with NPO capacitors) -55°C to +85°C (with X5R capacitors) |
| Maximum Resistor Power: | 0.05 Watts min. at 70°C (Not to exceed total package power) |
| Maximum Package Power: | 1.0 Watts at 70°C |
| Maximum Processing Temperature: | 235°C, 30 sec. |

Note: Maximum resistor power will vary by resistance value.

Packaging Information

| Suffix | TR7 | TR13 |
|---------------|--------|---------|
| Tape Width | 24 mm | 24mm |
| Carrier Pitch | 8 mm | 8 mm |
| Reel Diameter | 7 inch | 13 inch |
| Parts/Reel | 750 | 3,000 |

Part Number Coding

7 inch reel, Add TR7 to part number, example RC3001B6TR7

13 inch reel, Add TR13 to part number, example RC3001B6TR13

(Bulk packaging is not available)

