

RC Series 3000 **Technical** Data

Features

- Integrated Resistor and Capacitor • Network
- Excellent high frequency performance •
- Slim BGA Package ٠
- 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

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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	К	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





For .006" Thick Solder Paste Stencil, Aperture Opening Should be Equal to the PCB Pad Diameter.

Refer to www.ctscorp.com/resistor for Land Pattern Library

1.27mr	n Pitch	L	W	Н	Р	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	Н	Р	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	-55°C to +125°C (with NPO capacitors)
Range	-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	235°C, 30 sec.
Temperature:	200 0, 00 500.

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)

