

RCD SERIES

EMI/RFI RC Schottky Diode Network

Reflections on high speed data transmission result in signal distortions. These wave reflections and signal ringing adversely affect system performance. KOA's RCD integrated network for high speed bus termination is an effective solution to overcome these problems by minimizing stray emissions from PCB traces.

Features

- Highly integrated RCD network
- Low profile surface mount device
- Low lead inductance and parasitic capacitance
- Multiple terminating lines per package
- Stability and reliability
- Real estate savings
- Total components cost advantage

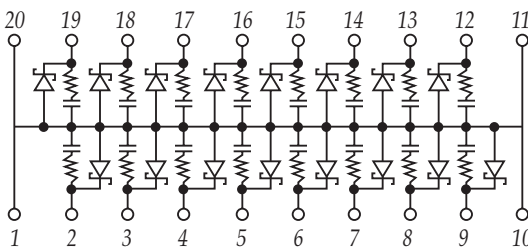
Applications

- AC termination
- Impedance matching
- Minimized distortion
- EMI/RFI suppression
- Reduce transmission line effects

Electrical Characteristics

- Resistance Range 10Ω to 10KΩ
- Capacitance Range 10pF to 100pF
- Diode Capacitance
(Ca) 5pF
- Forward Voltage
(Vf) @ If = 1mA Typical: 0.5V
- Forward Voltage
(Vf) @ If = 16mA 1V (max.)
- Reverse Breakdown
Voltage (Vr)
@ Ir = 1μA (25°C) ≥9V
- Reverse Breakdown
Voltage (Vr)
@ Ir = 10μA (70°C) ≥9V
- Maximum Operating
Voltage 7.5V
- Power Dissipation 100mW
- ESD >2KV
- Storage
Temperature Range -65°C to +150°C

Circuit Schematic



Available Pin Configurations

n = Number of Pins (20)
See physical configurations on page F-3
for available pin/package configurations.

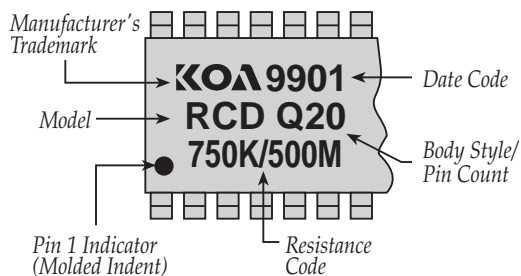
Physical Configurations

Body Style	Resistor/Capacitor Pin Count
Wide SOIC	20
QSOP	20
Die Pack *	20

Standard Resistance/Capacitance Values

Resistance (ohms)	Capacitance (pF)	Code
33	47	330/470
47	33	470/330
47	47	470/470
75	50	750/500
75	75	750/750

Part Marking



Mechanical Characteristics

Item	Material
Substrate	Silicon

* See page J-6 for Die Pack specifications.

Ordering Information

RCD	Q	20	B	750K/500M
Circuit Type	Body Style	Number of Pins	Packaging	Resistance/ Capacitance Value
	W = Wide SOIC	20 See above table	B = 13" Embossed Plastic Tape & Reel, see Packaging Section for details	2 significant digits + the number of zeros followed by the tolerance J = ±5% K = ±10% M = ±20%
	Q = QSOP			
	6 = 0.6 mm Die pack			
	5 = 0.5 mm Die pack			
	4 = 0.4 mm Die pack			