MODEL RC SERIES
Leadless Surface Mount Chip Resistor
Capacitor Network
Up to 16 Elements-8R/8C

FEATURES

- Thick film on ceramic construction
- Low profile suitable for PCMCIA
- Low inductance leadless design
- Available in two popular sizes: 1206 & 2512
- Nickel barrier terminations

APPLICATIONS

- High speed AC line termination
- EMI/RFI filtering
- Enhanced parallel port (IEEE 1284)

ELECTRICAL

Standard Resistance Range, Ohms
Resistance Tolerance
Temperature Coefficient of Resistance
Power Rating, Watts

RC 4: 63mW, RC 6: 250mW Per Package

Capacitance Max., pF

Capacitor Characteristic
Capacitor Tolerance
Capacitor Voltage Rating
Capacitor Max. ΔC, -55°C to +125°C
Capacitor Dissipation Factor
Capacitor Dielectric Withstanding Voltage
Capacitor Insulation Resistance
Operating Temperature Range

Specifications subject to change without notice.
ENVIRONMENTAL

Solderability
MIL-STD-202, Method 208, Cond. B, 95% Coverage

Life
1,000 hours at 70°C (±3%+.2 OhmΔR, ±10%ΔC)

Thermal Shock
MIL-STD-202F, Method 107, Cond. A (±3%+.2 OhmΔR, ±10%ΔC)

Moisture Resistance
MIL-STD-202F, Method 106 (±3%+.2 OhmΔR, ±10%ΔC)

SCHEMATICS

Schematics for RC 6

Circuit A

Circuit B

Circuit C

Circuit D

Circuit E

Schematic for RC 4

CONSTRUCTION

Glass Passivation

Capacitor:
Screened
Dielectric

Resistor: Cermet

90/10 Tin Lead
Solder Coating

Nickel Barrier

Silver Palladium

Substrate: Alumina
**MODEL RC SERIES**

- **Model Series**
- **Size Code:**
  - 4 = 1206
  - 6 = 2512
- **Circuit Type:**
  (Refer to schematics-
  Code used for
  Model RC 6 only)
- **Resistance Code:**
  (3 Digit Code in Ohms)
- **Packaging:**
  - 7 = 7" Tape & Reel
    - RC4: Paper Tape, 5K/Reel
    - RC6: Embossed Tape, 4K/Reel
  - 13 = 13" Tape & Reel*
    - RC4: Paper Tape, 20K/Reel
    - RC6: Embossed Tape, 16K/Reel
- **Capacitor Tolerance:**
  - M = 20%
- **Capacitor Code:**
  (3 Digit Code in Picofarads)
- **Resistance Tolerance:**
  - K = 10% (Optional)
  - M = 20% (Standard)

**ORDERING INFORMATION**

**PACKAGING (Inch/mm)**

- **Embossed Tape**
  - RC4: 0.138 ± 0.008
  - 3.5 ± 0.2
  - RC6: 0.269 ± 0.008
  - 6.8 ± 0.2
  - Upper-Surface
    - Covering Tape
  - Cavity For RC Chip
  - .024 Max.
    - 0.6
- **Reel**
  - .795 Min.
    - 20.2 Dia.
  - .512 ± .020
    - T3 ± 0.5 Dia.
  - .370 ± .059
    - 9.4 ± 1.5 Dia.
  - Label:
    - Includes Part Number, Date Code And Quantity

**DIAGRAM**

- Upper-Surface
  - Covering Tape
- Cavity For RC Chip

- **Dimensions**
  - .095 ± .004
    - 1.5 ± .01
  - .079 ± .002
    - 2.0 ± 0.05
  - .138 ± .002
    - 3.5 ± 0.05
  - .157 ± .004
    - 4.0 ± 0.1
  - .069 ± .004
    - 1.75 ± 0.10
  - .075 ± .008
    - 1.9 ± 0.2
  - .142 ± .008
    - 3.61 ± 0.2
  - .393 Max.
    - 1.94
  - Cavity For RC Chip

**BI TECHNOLOGIES CORPORATION**

**4-50**

**Model RC Series**