

Electrical Characteristics

| Power Rating @ 70 °C1/16 W Operating Temperature Range |
|---|
| 55 °C to +155 °C |
| Derated to 0 Load at+155 °C |
| Maximum Working Voltage |
| Resistance Range |
| 1 %, E-96 and E-24 |
| 10 ohms to 1 megohm |
| 5 %, E-24 2 ohms to 5.6 megohms |
| Zero Ohm Jumper<0.05 ohms |
| Temperature Coefficient |
| 1 %±100 ppm/°C |
| 5 %±200 ppm/°C 1 ohm to 10 ohms |
| |

For Standard Values Used in Capacitors, Inductors, and Resistors, click here.

Dimensional Drawings

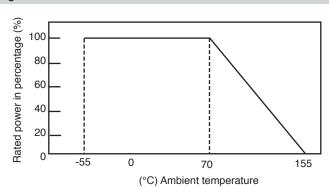
Features

- Small package dimensions
- RoHS compliant*
- Power rating at 70 °C = 1/16 W
- Tight dimensional tolerances
- Three layer termination process with nickel barrier prevents leaching and provides excellent solderability

CR0402 - Chip Resistor

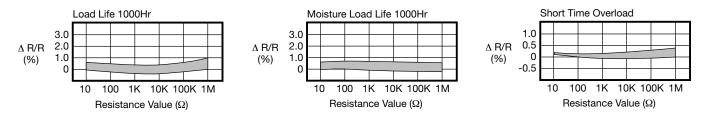
- Suitable for most types of soldering processes
- Standard packaging on paper tape and reel

Derating Curve



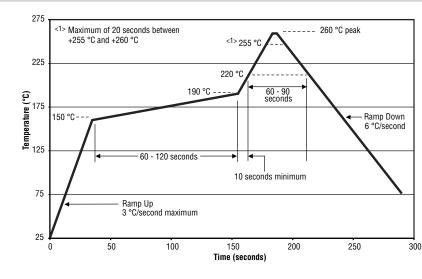
Resistor (Ru02) (Jumper chip is a conductor) Overcoat 0.20 ± 0.10 0.20 ± 0.10 (0.008 ± 0.004) (0.008 ± 0.004) 0.35 ± 0.05 (0.014 ± 0.002) $\frac{0.50 \pm 0.05}{(0.020 \pm 0.002)}$ 0.25 ± 0.10 0.25 ± 0.10 Alumina Substrate (0.010 ± 0.004) (0.010 ± 0.004) Internal Electrode (Ag-Pd) 1.00 ± 0.10 (0.040 ± 0.004) Secondary Electrode (Nickel Plated) External Electrode (see Part Numbering - may be ordered as solder-plated or tin-plated) MM DIMENSIONS ARE: (INCHES)

Characteristic Data



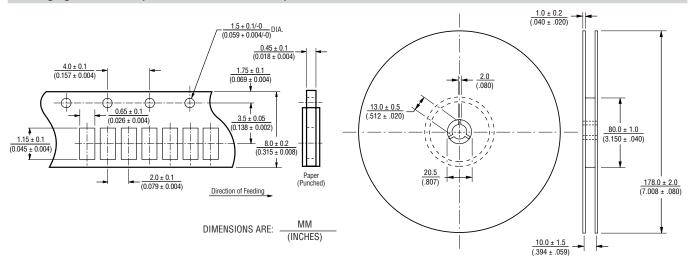
CR0402 - Chip Resistor

BOURNS®



Soldering Profile for RoHS Compliant Chip Resistors and Arrays

Packaging Dimensions (Conforms to EIA RS-481A)



Part Marking System

No Marking on the CR0402 Chip Resistors.

CR0402 - Chip Resistor

BOURNS®

CR 0402 - F X - 8252 G LF

How To Order

Model (CR = Chip Resistor)

Size _____ • 0402

| Resistance Tolerance | |
|---|--|
| TCR (ppm/°C) X = ±100Used with "F" Resistance Tolerance code only for values from 10 ohms through 1 megohm. W = ±200Used with "J" Resistance Tolerance code only for values from 10 ohms through 5.6 megohms. / = -250 to +500Used with "J" Resistance Tolerance code only for zero ohm (jumper), and for values from 1 ohm through 9.1ohms. | |
| Resistance Value | |
| For 1 % Tolerance: <100 ohms | |
| For 5 % Tolerance: <10 ohms | |
| Packaging — G = Paper Tape (10,000 pcs.) on 7 " Plastic Reel | |

Termination ______ LF = Tin-plated (RoHS compliant)