



## Features

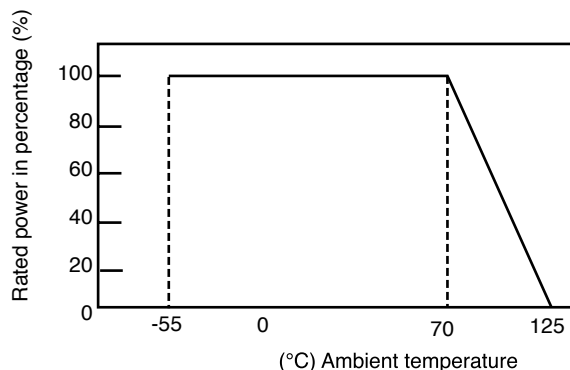
- Small package dimensions
- Lead free version available (see How to Order "Termination" options)
- RoHS compliant\*
- Power rating at 70 °C = 1/16 W
- Tight dimensional tolerances
- Three layer termination process with nickel barrier prevents leaching and provides excellent solderability
- Suitable for most types of soldering processes
- Standard packaging on paper tape and reel

## CR0402 - Chip Resistor

### Electrical Characteristics

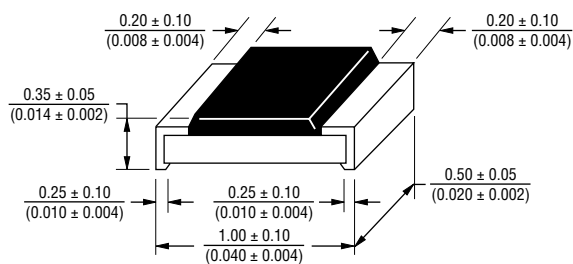
Power Rating @ 70 °C.....1/16 W  
 Operating Temperature Range  
     .....-55 °C to +125 °C  
 Derated to 0 Load at .....+125 °C  
 Maximum Working Voltage.....25 V  
 Maximum Overload Voltage .....50 V  
 Resistance Range  
     1 %, E-96 and E-24  
     .....10 ohms to 1 megohm  
     5 %, E-24  
     .....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  
     .....-200 ppm/°C to +500 ppm/°C

### Derating Curve

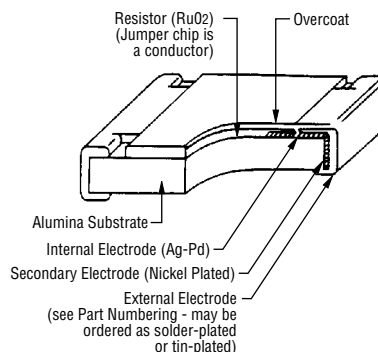


For Standard Values Used in Capacitors, Inductors, and Resistors, [click here](#).

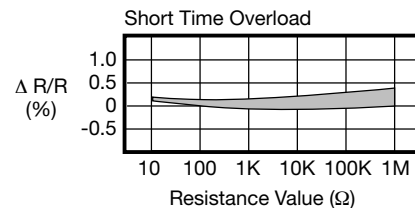
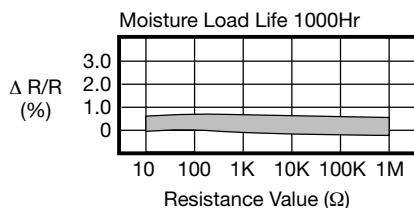
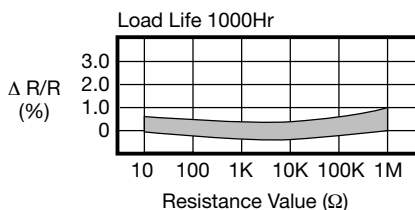
### Dimensional Drawings



DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$



### Characteristic Data

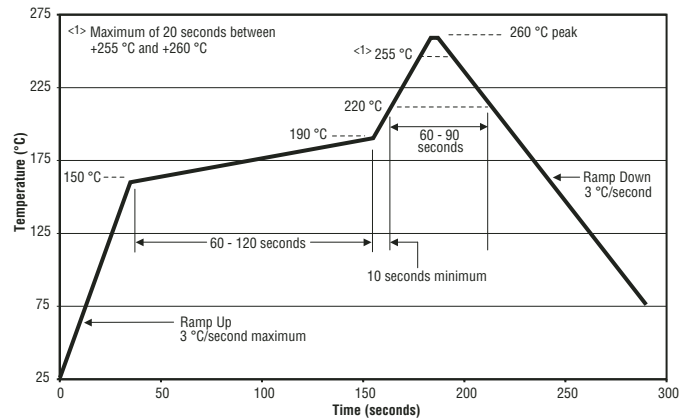


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

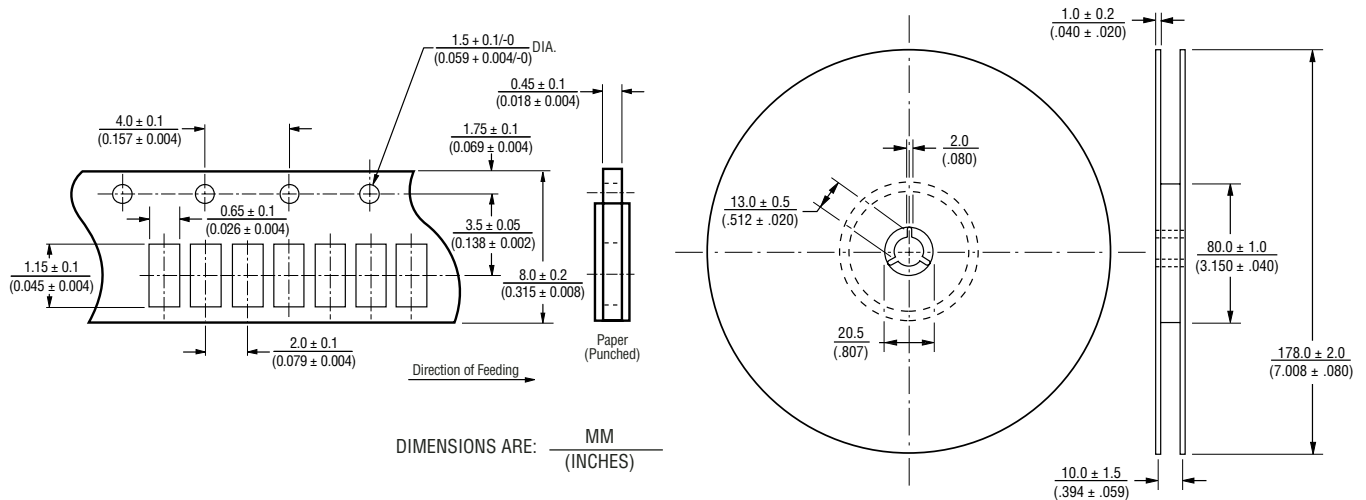
# CR0402 - Chip Resistor

**BOURNS®**

## Soldering Profile for Lead Free 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®**

## How To Order

**CR 0402 - F X - 8252 G**

Model \_\_\_\_\_  
(CR = Chip Resistor)

Size \_\_\_\_\_  
• 0402

Resistance Tolerance \_\_\_\_\_  
F =  $\pm 1\%$  .....Used with "X" TCR code only for values from 10 ohms through 1 megohm.  
J =  $\pm 5\%$  .....Used with "W" TCR code for values from 10 ohms through 5.6 megohms. Used with "/" TCR code for zero ohm (jumper)  
.....and for values from 1 ohm through 9.1 ohms.

TCR (ppm/ $^{\circ}$ C) \_\_\_\_\_  
X =  $\pm 100$  .....Used with "F" Resistance Tolerance code only for values from 10 ohms through 1 megohm.  
W =  $\pm 200$  .....Used with "J" Resistance Tolerance code only for values from 10 ohms through 5.6 megohms.  
/ = -250 to +500 ..Used 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....."R" designates decimal point (example: 24R3 = 24.3 ohms)  
 $\geq 100$  ohms.....First three digits are significant, fourth digit represents number of zeros to follow (example: 8252 = 82.5k ohms).  
For 5 % Tolerance:  
<10 ohms....."R" designates decimal point (example: 4R7 = 4.7 ohms)  
 $\geq 10$  ohms.....First two digits are significant, third digit represents number of zeros to follow (example: 474 = 470k ohms; 000 = Jumper).

Packaging \_\_\_\_\_  
G = Paper Tape (10,000 pcs.) on 7 " Plastic Reel

Termination \_\_\_\_\_  
LF = Tin-plated (lead free)  
\_\_\_ = Solder-plated