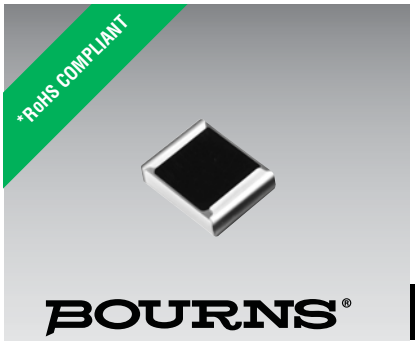


## Features

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

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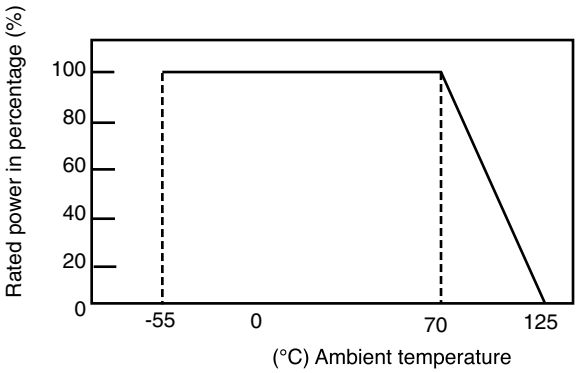
# CR0402 - Chip Resistor

### Electrical Characteristics

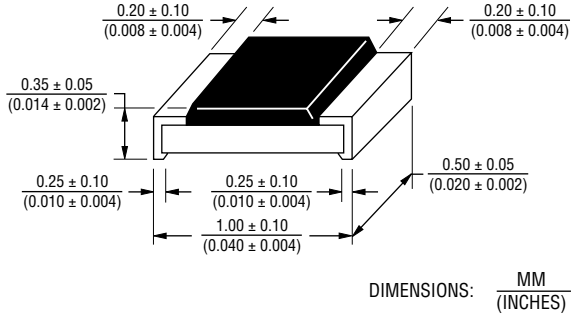
Power Rating @ 70 °C..... 1/16 W
Operating Temperature Range
.....-55 °C to +125 °C
Derated to 0 Load at .....+125 °C
Maximum Working Voltage.....50 V
Maximum Overload Voltage .....100 V
Resistance Range
1 %, E-96 and E-24
.....10 ohms to 1 megohm
5 %, E-24
.....2.2 ohms to 5.6 megohms
Zero Ohm Jumper.....<0.05 ohms
Temperature Coefficient
1 %..... ±100 ppm/°C
5 %..... ±200 ppm/°C
2.2 ohm to 10 ohms
..... -200 ppm/°C to +500 ppm/°C

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

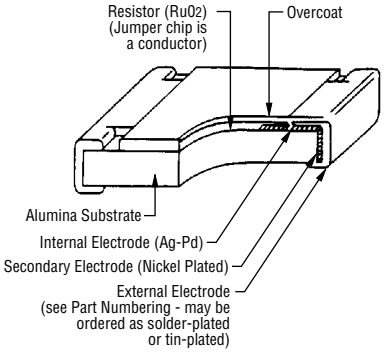
### Derating Curve



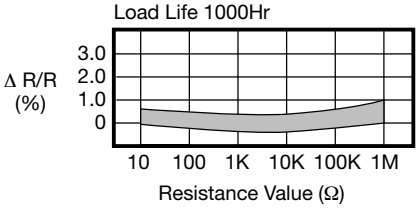

### Dimensional Drawings

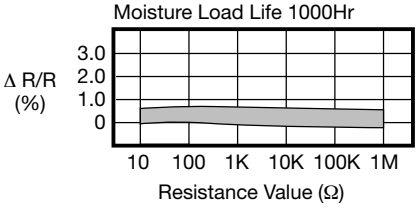


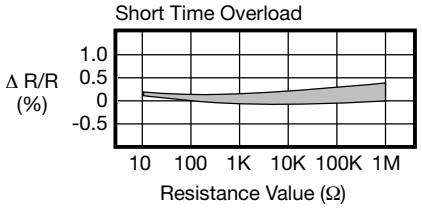

DIMENSIONS: MM / (INCHES)




### 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.

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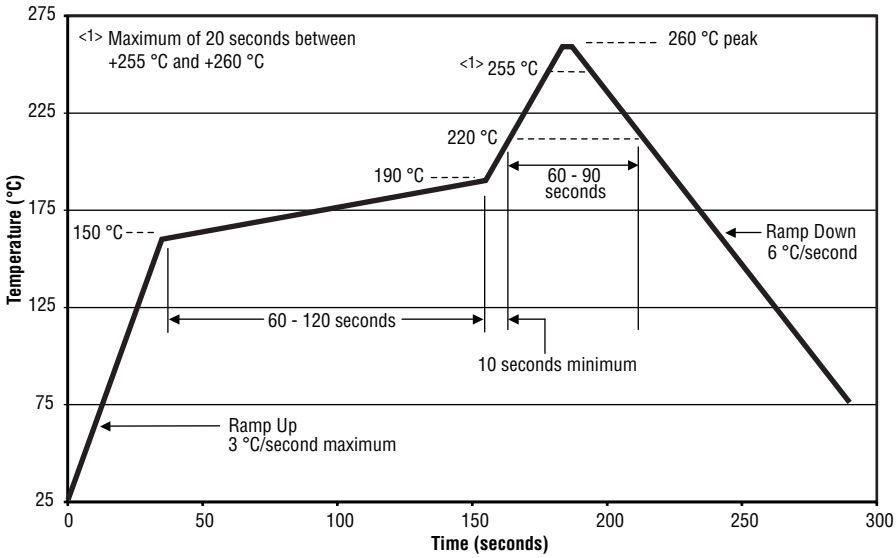
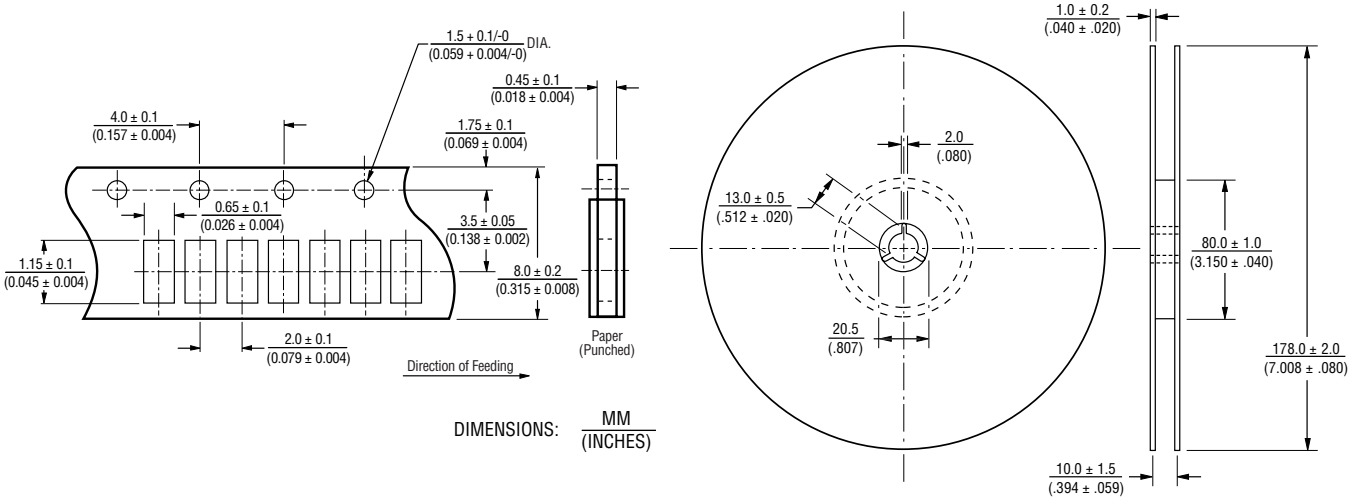
## Soldering Profile for RoHS Compliant Chip Resistors and Arrays




## Packaging Dimensions (Conforms to EIA RS-481A)




## Part Marking System

No Marking on the CR0402 Chip Resistors.

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# CR0402 - Chip Resistor

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## How to Order

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

Model
(CR = Chip Resistor)

Size
- 0402

Resistance Tolerance
F = ±1 % .....Used with “X” TCR code only for values from 10 ohms through 1 megohm.
J = ±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/°C)
X = ±100 .....Used with “F” Resistance Tolerance code only for values from 10 ohms through 1 megohm.
W = ±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)
≥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)
≥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 (RoHS compliant)



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