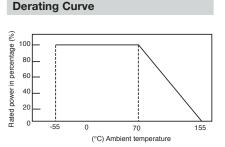


Features

- RoHS compliant*
- Power rating at 70 °C: CR2010 1/2 W, CR2512 - 1 W
- Tight tolerances of bottom electrode width
- Three layer termination process with nickel barrier prevents leaching and provides excellent solderability
- Suitable for most types of soldering processes
- Standard packaging on tape and reel

CR2010/CR2512 - Chip Resistors

Electrical Characteristics				
Characteristic	Model CR2010	Model CR2512		
Power Rating @ 70 °C	1/2 W	1 W		
Operating Temperature Range	-55 °C to +155 °C			
Derated to 0 Load at	+155 °C			
Maximum Working Voltage	200 V			
Maximum Overload Voltage	400 V			
Resistance Range: 1 %, E-96 + E-24 5 %, E-24	10 ohms to 1 megohm 1 ohm to 10 megohms 0 ohm Jumper <50 milliohms			
Temperature Coefficient: 1 % Tolerance 5 % Tolerance 1 ohm to 10 ohms	±100 ppm/°C ±200 ppm/°C -200 ppm/°C to +500 ppm/°C			



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

Chip Dimensions

Dimension	Model CR2010	Model CR2512
L	$\frac{5.00 \pm 0.20}{(0.197 \pm 0.008)}$	$\frac{6.30 \pm 0.20}{(0.248 \pm 0.008)}$
W	$\frac{2.50 \pm 0.20}{(0.098 \pm 0.008)}$	$\frac{3.10 \pm 0.20}{(0.122 \pm 0.008)}$
Н	$\frac{0.60 \pm 0.10}{(0.024 \pm 0.004)}$	$\frac{0.60 \pm 0.15}{(0.024 \pm 0.006)}$
I ₁	$\frac{0.60 \pm 0.25}{(0.024 \pm 0.010)}$	$\frac{0.60 \pm 0.25}{(0.024 \pm 0.010)}$
l ₂	$\frac{0.60 \pm 0.25}{(0.024 \pm 0.010)}$	$\frac{0.60 \pm 0.25}{(0.024 \pm 0.010)}$

Dimensional Drawing DIMENSIONS ARE: -(INCHES)

How To Order

CR 2010 - F X - 8252 E LF Model (CR = Chip Resistor) Size — 2010 • 2512 Resistance Tolerance TCR (ppm/°C) X = ±100Used with "F" Resistance Tolerance code only for values from 10 ohms through 1 megohm.

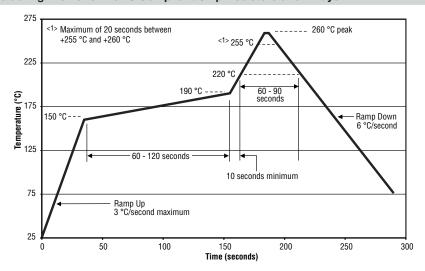
W = ±200Used with "J" Resistance Tolerance code only for values from 10 ohms through 10 megohm.

/ = -250 to +500 ..Used with "J" Resistance Tolerance code only for zero ohm (jumper), and for values from 1 ohms through 9.1 ohms. $W = \pm 200$ Resistance Value For 1 % Tolerance: Packaging E = Embossed Plastic Tape (4,000 pcs.) on 7 " Plastic Reel

CR2010/CR2512 - Chip Resistors

BOURNS®

Soldering Profile for RoHS Compliant Chip Resistors and Arrays

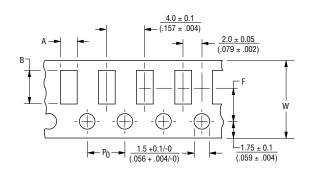


Marking Explanation

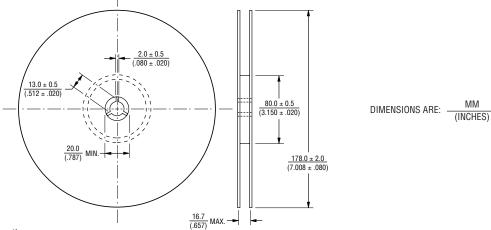
Resistors with 5 % tolerance may have a 3-digit or 4-digit resistance code. Complete information about resistance value and tolerance is found on the label of the reel of chip resistors.

- 5 %: 3 digits, first two digits are significant, third digit is number of zeros to follow. Letter R is decimal point for values from 1 to 9.9 ohms.
- 5 %: 4 digits, first three digits are significant, fourth digit is number of zeros to follow. Letter R is decimal point for values from 1 to 99.9 ohms.
- 1 %: 4 digits, first three digits are significant, fourth digit is number of zeros to follow. Letter R is decimal for values from 1 to 99.9 ohms.

Packaging Dimensions



Dimension	Model CR2010	Model CR2512
А	$\frac{2.8 \pm 0.2}{(0.110 \pm 0.008)}$	$\frac{3.5 \pm 0.2}{(0.138 \pm 0.008)}$
В	$\frac{5.5 \pm 0.2}{(0.217 \pm 0.008)}$	$\frac{6.7 \pm 0.2}{(0.264 \pm 0.008)}$
W	$\frac{12.0 \pm 0.3}{(0.472 \pm 0.012)}$	$\frac{12.0 \pm 0.3}{(0.472 \pm 0.012)}$
F	$\frac{5.5 \pm 0.05}{(0.217 \pm 0.002)}$	$\frac{5.5 \pm 0.05}{(0.217 \pm 0.002)}$
P ₀	$\frac{4.0 \pm 0.1}{(0.157 \pm 0.004)}$	$\frac{4.0 \pm 0.1}{(0.157 \pm 0.004)}$



Specifications are subject to change without notice

REV. 02/08

Customers should verify actual device performance in their specific applications..