

Features

- Thick film technology
- Power rating of 2 watts at 70 °C
- RoHS compliant*

Applications

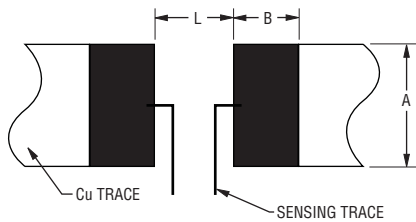
- Power supplies
- Stepper motor drives

CRM2512 - Pulse Resistant Power Resistor

Electrical Characteristics

Power Rating @ 70 °C	2 W
Operating Temperature Range	-55 °C to +155 °C
Derated to Zero Load at	+155 °C
Maximum Working Voltage 0.047 to 0.91 ohms 1.0 ohm to 1.0 megohm	3017 mV 600 V
Insulation Resistance	> 1000 megohms
Resistance Range	0.047 - 1 megohm
Resistance Tolerance	±1 %, ±5 %
Temperature Coefficient 0.047 to 0.091 ohms 0.100 to 0.91 ohms 1.0 ohm to 1 megohm 10 ohms to 1 megohm	±150 PPM/°C ±100 PPM/°C ±200 PPM/°C (Tolerance 5 %, E24 Values) ±100 PPM/°C (Tolerance 1 %, E96 Values)

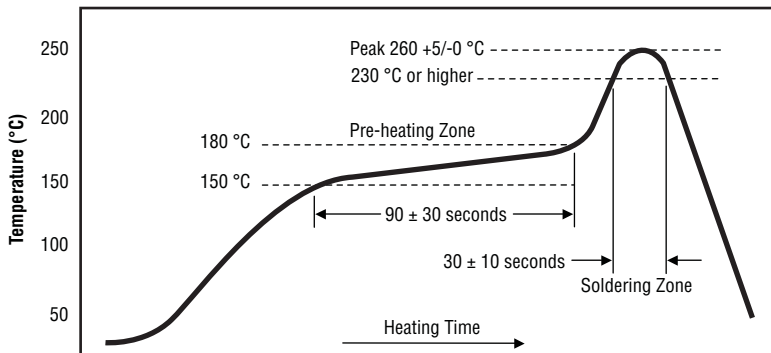
Recommended Solder Pad Layout



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

Model	A	B	L
CRM2512	$\frac{3.7}{(0.146)}$	$\frac{2.45}{(0.096)}$	$\frac{2.7}{(0.106)}$

Soldering Profile



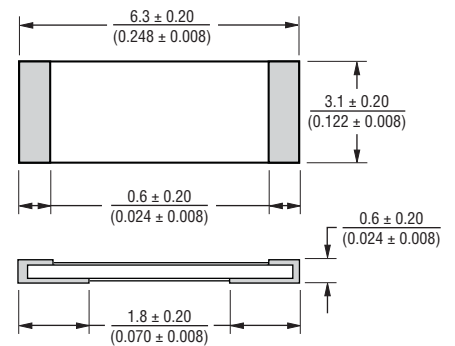
General Information

The Bourns® CRM2512 Series is a thick-film power resistor with a rating of 2 watts in a standard 2512 chip format. This product has a very wide resistance range making it suitable for different applications in power supply circuits including current sensing and inrush current limiting.

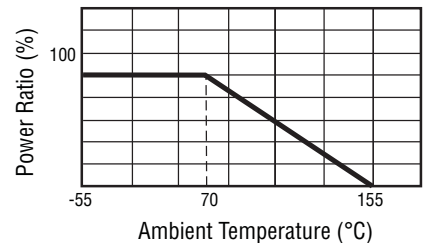
Characteristic Data

Test	ΔR Max.
Load Life (1000 hours)	
1 % Tolerance	< 1 %
5 % Tolerance	< 3 %
Short Term Overload	
1 % Tolerance	< 1 %
5 % Tolerance	< 2 %
Thermal Shock	
1 % Tolerance	< 0.5 %
5 % Tolerance	< 1 %

Product Dimensions



Derating Curve

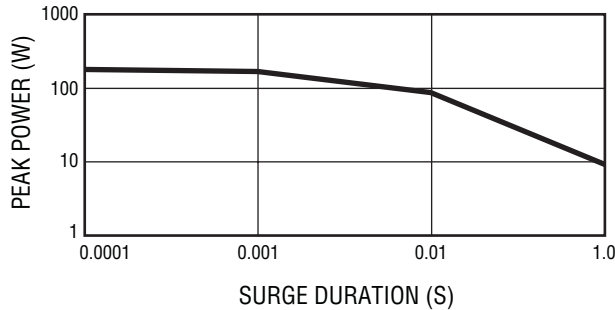


*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications

CRM2512 - Pulse Resistant Power Resistor

BOURNS®

Pulse Load Characteristics (R > 1 Ohm)



Resistance Value Table (0.047-0.91 Ω)

Code	R Value	Code	R Value
R047	0.047	R200	0.200
R050	0.050	R300	0.300
R060	0.060	R510	0.510
R075	0.075	R750	0.750
R082	0.082	R820	0.820
R090	0.090	R910	0.910
R100	0.100		

How to Order

CRM 2512 - F X - R100 E LF

Model _____
(CRM = Precision Chip Resistor)

Size _____
2512 = 2512 Size

Resistance Tolerance _____
• F = ±1 %
• J = ±5 %

TCR (PPM/°C) _____
• W = ±200 PPM/°C
• Z = ±150 PPM/°C
• X = ±100 PPM/°C

Resistance Value _____
R <1 ohm (1 % or 5 % Tolerance): "R" (decimal point) followed by three significant digits (example: R100 = 0.100 ohm)
1% Tolerance:
<100 ohms "R" represents 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)
5% Tolerance:
<10 ohms "R" represents 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)

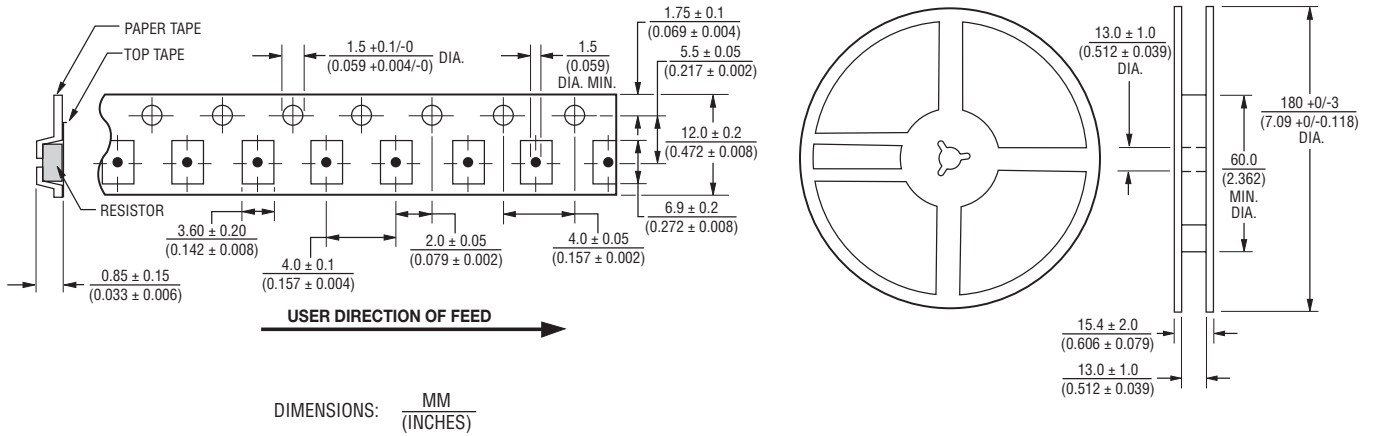
Packaging _____
• E = 4000 pieces on 180 mm (7 inch) reel

Termination _____
• LF = Tin-plated (RoHS Compliant)

CRM2512 - Pulse Resistant Power Resistor

BOURNS®

Packaging Dimensions (Conforms to EIA RS-481A)



REV. 05/22/09

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications