



Features

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

Applications

- Power supplies
- Stepper motor drives

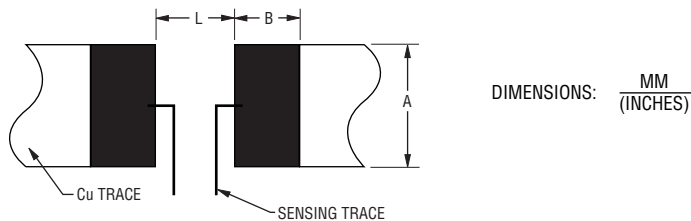
CRM2512 - Pulse Resistant Power Resistor

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 - 0.91 ohm (E24 Values) 1.0 - 9.1 ohms (E24 Values) 10.0 ohms - 1 megohm (E24 + E96 Values)
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 ±100 PPM/°C

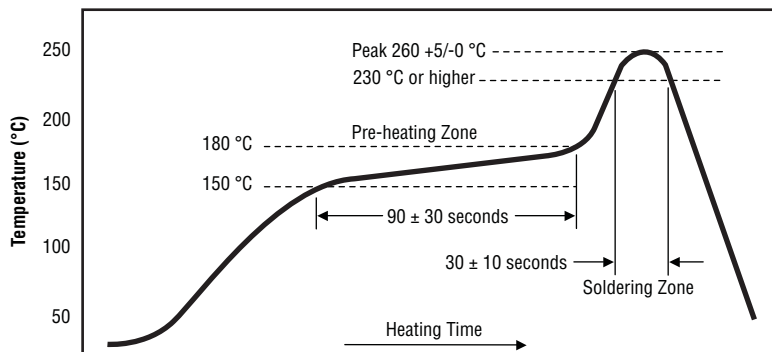
For Standard Values Used in Capacitors, Inductors, and Resistors, [click here](#).

Recommended Solder Pad Layout



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

Soldering Profile



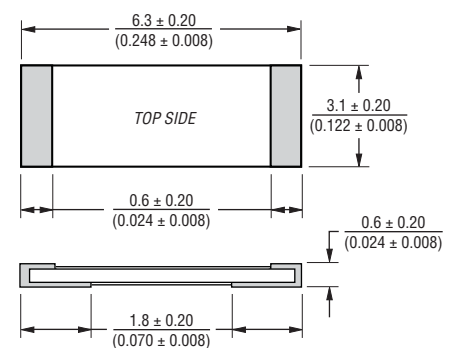
General Information

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.

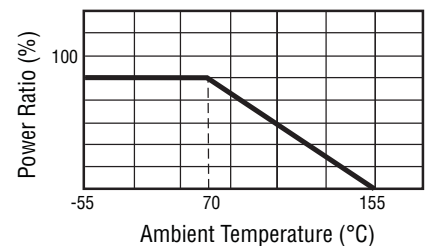
Characteristic Data

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

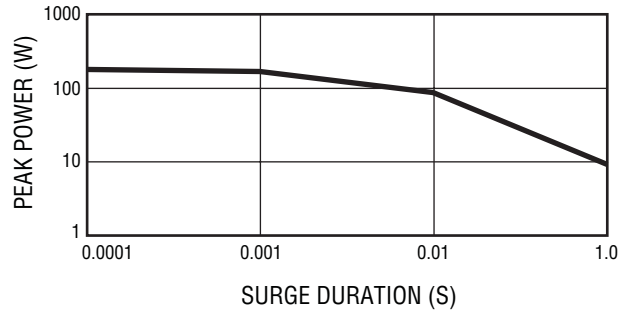


*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications

CRM2512 - Pulse Resistant Power Resistor

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Pulse Load Characteristics (R > 1 Ohm)



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

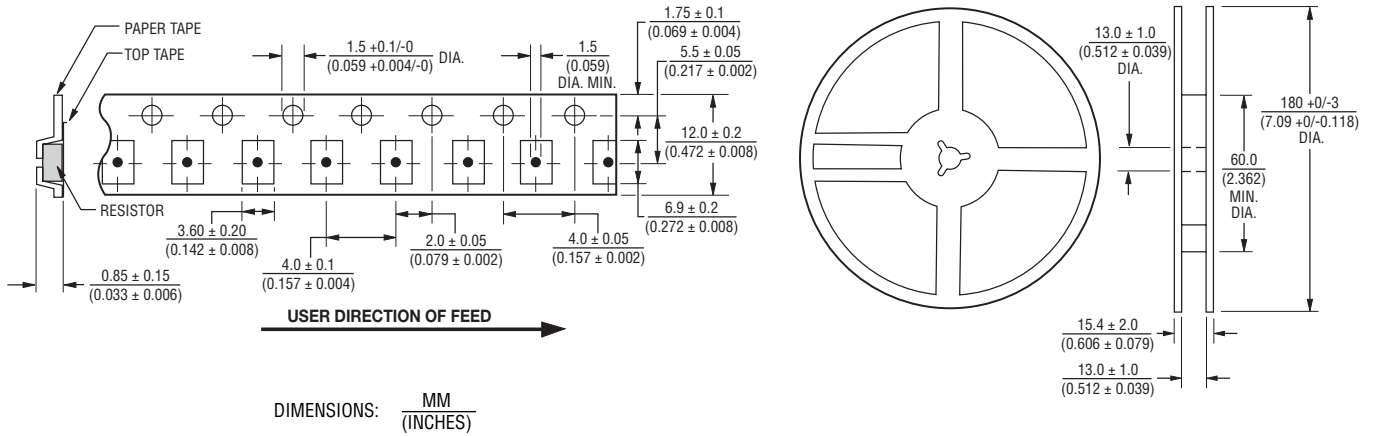
Termination _____
• LF = Tin-plated (RoHS Compliant)

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CRM2512 - Pulse Resistant Power Resistor

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Packaging Dimensions (Conforms to EIA RS-481A)



REV. 05/11

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