



Features

- Special alloy resistor
- Power rating at 70 °C: CRA2010 - 1.5 W, CRA2512 - 3 W
- RoHS compliant*

Applications

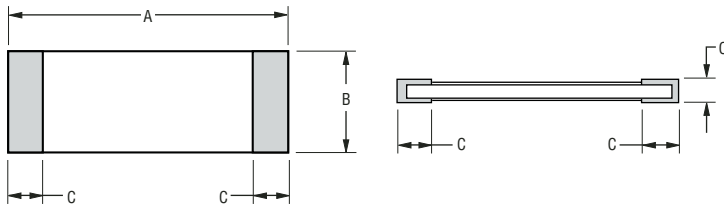
- Power supplies
- Stepper motor drives

CRA2010/CRA2512 - High Power Current Sense Chip Resistor

Electrical Characteristics

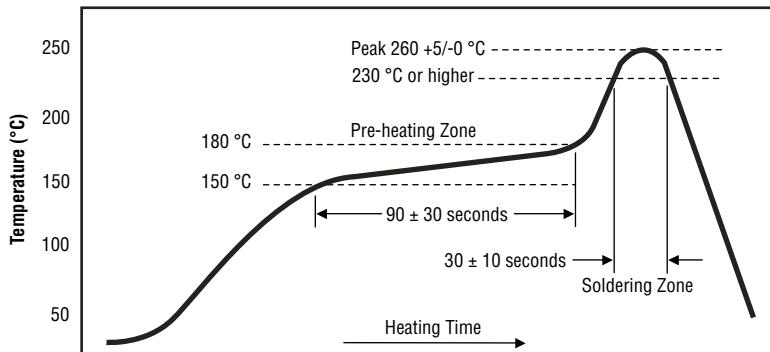
Characteristic	CRA2010	CRA2512
Power Rating @ 70 °C	1.5 W	3 W
Operating Temperature Range	-55 °C to +170 °C	
Derated to Zero Load at	+170 °C	
Maximum Working Voltage	$(P \times R)^{1/2}$	
Insulation Resistance	> 100 megohms	
Resistance Range	0.01 - 0.100 ohms	
Resistance Tolerance	±1 %, ±5 %	
Temperature Coefficient	±75 PPM/°C	

Product Dimensions



Model	A	B	C
CRA2010	$\frac{5.0 \pm 0.20}{(0.1962 \pm 0.008)}$	$\frac{2.5 \pm 0.20}{(0.0984 \pm 0.008)}$	$\frac{0.6 \pm 0.20}{(0.0236 \pm 0.008)}$
CRA2512	$\frac{6.40 \pm 0.20}{(0.252 \pm 0.008)}$	$\frac{3.20 \pm 0.20}{(0.126 \pm 0.008)}$	$\frac{0.90 \pm 0.20}{(0.035 \pm 0.008)}$

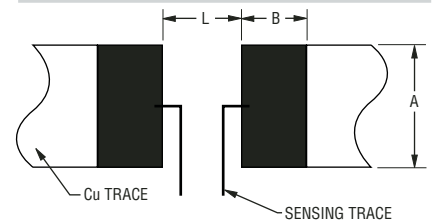
Soldering Profile



Characteristic Data

Test	ΔR Max.
Load Life (1000 hours)	< ±1 %
Short Time Overload	< ±0.5 %
Thermal Shock	< ±0.5 %

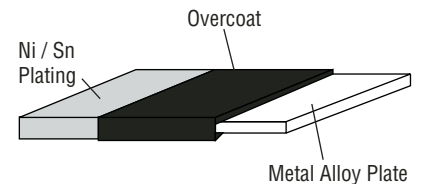
Recommended Solder Pad Layout



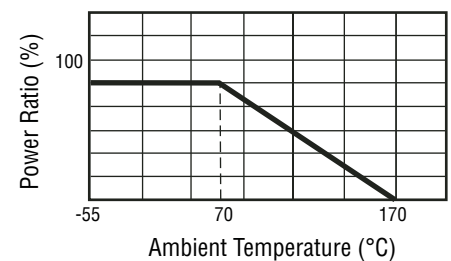
Model	A	B	L
CRA2010	$\frac{3.1}{(0.122)}$	$\frac{2.7}{(0.106)}$	$\frac{3.1}{(0.122)}$
CRA2512	$\frac{4.0}{(0.157)}$	$\frac{2.1}{(0.083)}$	$\frac{4.1}{(0.161)}$

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

Construction



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.

