



Features

- High current rating up to 100 A
- Operating temperature range -55 °C to +150 °C
- AEC-Q200 compliant
- RoHS compliant*
- Tape and reel packaging

Applications

- Consumer
- Industrial
- Telecommunications
- Automotive

CRF Series – High Current Zero Ohm Jumper

Electrical Characteristics

Rating	CRF0805	CRF1206	CRF2010	CRF2512
Power Rating @ 70 °C	0.5 W	1 W	1.5 W	2 W
Operating Temperature Range	-55 °C to +150 °C			
Resistance Value (Max.)	≤ 0.2 mΩ			
Temperature Coefficient	3800 PPM/°C			
Maximum Rated Current	50 A	70 A	86 A	100 A
Tolerance	±5 %			

Additional Information

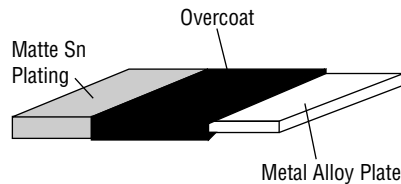
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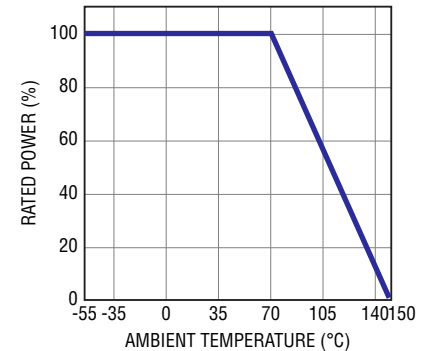
Performance Characteristics

Test Items	Test Conditions	Test Limits
Bias Humidity	+85 °C, 85 % RH, 10 % Bias, 1000 hours	0805 ≤0.2mΩ 1206 ≤0.2mΩ 2010 ≤0.2mΩ 2512 ≤0.2mΩ
Short Time Overload	5X rated power for 5 seconds	
Low Temperature Operation	-55 °C for 45 min	
High Temperature Exposure	1000 hours @ +125 °C	
Mechanical Shock	100 g for 6 milliseconds, 5 pulses	
Operation Life	1000 hours at rated power at +70 °C, 1.5 hours on, 0.5 hours off	
Resistance to Solder Heat	+260 °C ±5 °C, 10 ±1 second dwell, 25 mm/second emergence	
Vibration	5g's for 20 min., 12 cycles, 10-2 KHz	

Construction



Derating Curve



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WARNING
Cancer and Reproductive Harm

www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

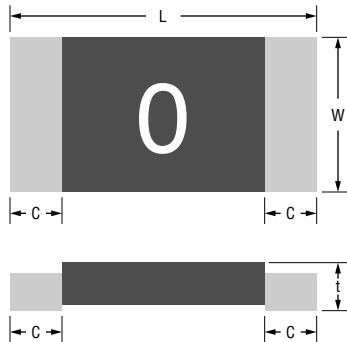
Users should verify actual device performance in their specific applications.

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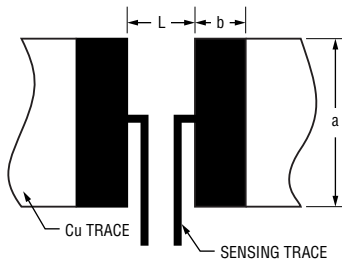
Product Dimensions



Dim.	CRF0805	CRF1206	CRF2010	CRF2512
L	$\frac{2.0 \pm 0.20}{(0.079 \pm 0.008)}$	$\frac{3.20 \pm 0.20}{(0.126 \pm 0.008)}$	$\frac{5.00 \pm 0.20}{(0.197 \pm 0.008)}$	$\frac{6.40 \pm 0.20}{(0.252 \pm 0.008)}$
W	$\frac{1.25 \pm 0.20}{(0.049 \pm 0.008)}$	$\frac{1.60 \pm 0.20}{(0.063 \pm 0.008)}$	$\frac{2.50 \pm 0.20}{(0.098 \pm 0.008)}$	$\frac{3.20 \pm 0.20}{(0.126 \pm 0.008)}$
C	$\frac{0.40 \pm 0.20}{(0.016 \pm 0.008)}$	$\frac{0.55 \pm 0.20}{(0.022 \pm 0.008)}$	$\frac{0.65 \pm 0.20}{(0.026 \pm 0.008)}$	$\frac{0.90 \pm 0.20}{(0.035 \pm 0.008)}$
t	$\frac{0.70 \pm 0.20}{(0.028 \pm 0.008)}$			

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

Recommended Solder Pad Layout



Dim.	CRF0805	CRF1206	CRF2010	CRF2512
a	$\frac{1.4}{(0.055)}$	$\frac{1.8}{(0.071)}$	$\frac{3.4}{(0.134)}$	$\frac{4.0}{(0.157)}$
b	$\frac{1.2}{(0.047)}$	$\frac{1.7}{(0.067)}$	$\frac{1.8}{(0.071)}$	$\frac{2.1}{(0.083)}$
L	$\frac{1.1}{(0.043)}$	$\frac{1.6}{(0.063)}$	$\frac{3.5}{(0.138)}$	$\frac{4.1}{(0.161)}$

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

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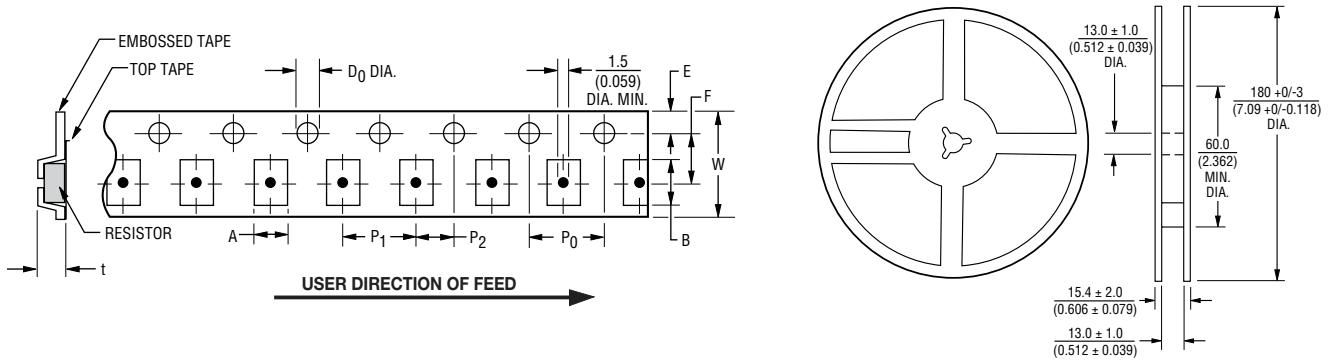
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CRF Series – High Current Zero Ohm Jumper



Packaging Dimensions (Conforms to EIA RS-481A)



Packing	Model	A	B	W	F	E	P1	P2	P0	D0	t
Paper Tape	CRF0805	$\frac{1.6 \pm 0.15}{(.063 \pm .006)}$	$\frac{2.4 \pm 0.20}{(.094 \pm .008)}$	$\frac{8.0 \pm 0.20}{(.315 \pm .008)}$	$\frac{3.5 \pm 0.05}{(.138 \pm .002)}$	$\frac{1.75 \pm 0.10}{(.069 \pm .004)}$	$\frac{4.0 \pm 0.10}{(.157 \pm .004)}$	$\frac{2.0 \pm 0.1}{(.079 \pm .004)}$	$\frac{4.0 \pm 0.10}{(.157 \pm .004)}$	$\frac{1.5 +0.1/-0}{(.059 \pm .004/-0)}$	$\frac{0.84 \pm 0.10}{(.033 \pm .004)}$
Paper Tape	CRF1206	$\frac{2.0 \pm 0.15}{(.079 \pm .006)}$	$\frac{3.6 \pm 0.20}{(.142 \pm .008)}$					$\frac{2.0 \pm 0.05}{(.079 \pm .002)}$	$\frac{4.0 \pm 0.05}{(.157 \pm .002)}$		
Embossed Tape	CRF2010	$\frac{2.8 \pm 0.20}{(.110 \pm .008)}$	$\frac{5.3 \pm 0.20}{(.209 \pm .008)}$	$\frac{12.0 \pm 0.20}{(.472 \pm .008)}$	$\frac{5.5 \pm 0.05}{(.217 \pm .002)}$			$\frac{2.0 \pm 0.05}{(.079 \pm .002)}$	$\frac{2.0 \pm 0.05}{(.079 \pm .002)}$		$\frac{0.85 \pm 0.15}{(.033 \pm .006)}$
Embossed Tape	CRF2512	$\frac{3.60 \pm 0.20}{(.142 \pm .008)}$	$\frac{6.9 \pm 0.20}{(.272 \pm .008)}$	$\frac{2.0 \pm 0.05}{(.079 \pm .002)}$	$\frac{2.0 \pm 0.05}{(.079 \pm .002)}$			$\frac{0.85 \pm 0.15}{(.033 \pm .006)}$			

How to Order

CRF 0805 - J / - 000 E LF

Model _____
 CRF = Precision Chip Resistor

Size _____
 0805 = 0805 Size
 1206 = 1206 Size
 2010 = 2010 Size
 2512 = 2512 Size

Resistance Tolerance _____
 J = ±5 %

TCR _____
 3800 PPM/°C

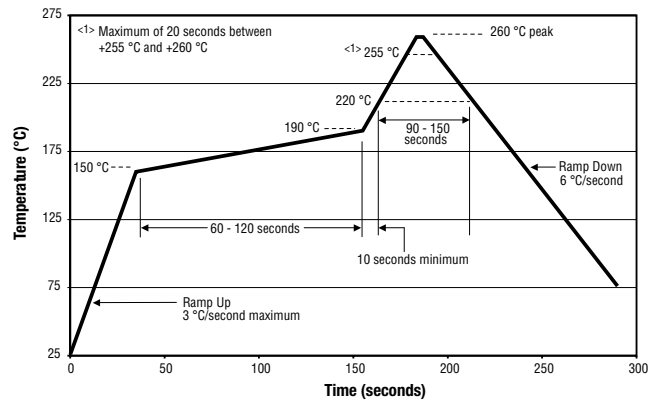
Resistance Value Code _____
 000 = Jumper

Packaging _____
 E = Tape and Reel Packaged per EIA 481
 5000 pcs. per 7-inch reel (CRF0805 & CRF1206)
 4000 pcs. per 7-inch reel (CRF2010 & CRF2512)

Termination _____
 LF = Tin-plated (RoHS compliant)

Soldering Profile

Can be soldered in accordance with IPC/JEDEC-J-STD-020.



REV. 01/24

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