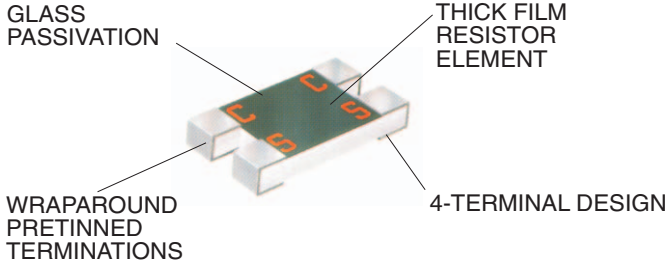


# State of the Art, Inc.

## Current Sense Chip Resistor

1206 size, Surface Mount, 4-Terminal Kelvin



### FEATURES

- Tolerances to 1%
- Operating temperature range : -55°C to +150°C
- Pretinned (Sn60) nickel barrier terminations
- Ideal for current sensing
- Manufactured using the same process as our MIL-PRF-55342 "S" level qualified chips
- Suitable for solder reflow, vapor phase, or wave solder attachment

### PERFORMANCE CHARACTERISTICS

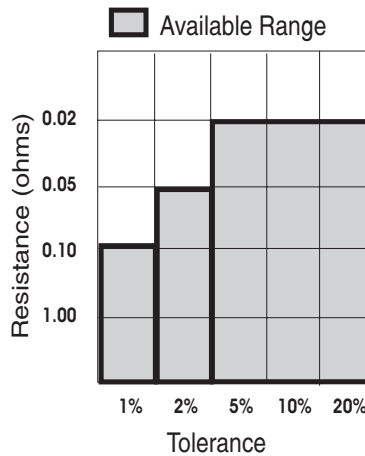
Resistance Range	0.020 Ohms -1 Ohm
Tolerances	1%, 2%, 5%, 10%, 20%
Maximum Power	250 mW
Maximum Voltage	100 Volts

#### ENVIRONMENTAL PERFORMANCE \*

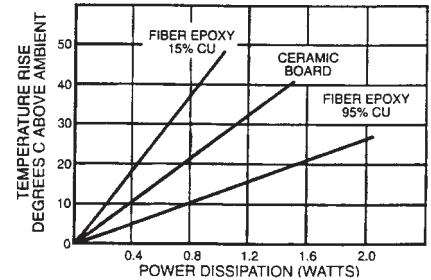
TCR (-55 to +125°C in ppm/°C)	< 600 ppm
Thermal Shock	±0.03%
Low Temperature Operation	±0.02%
Short-time Overload	±0.02%
Resistance to Bonding Exposure	±0.03%
Moisture Resistance	±0.05%
High Temperature Exposure	±0.05%

\*Typical resistance change.  
Test methods are per MIL-PRF-55342.

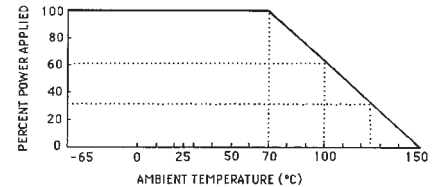
#### RESISTANCE TABLE



#### POWER DISSIPATION

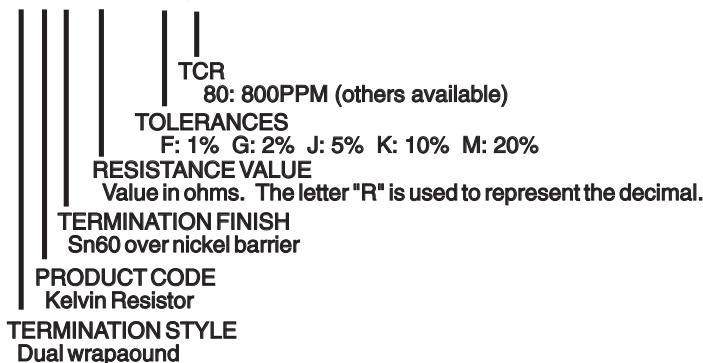


#### POWER DERATING



### PART NUMBERING

**S1206CKX0R02 J 80**



### MECHANICAL

	INCHES	MILIMETERS
Length	.125 (.123 - .133)	3.18 (3.12 - 3.38)
Width	.063 (.061 - .069)	1.60 (1.55 - 1.75)
Thickness	.015 (.013 - .023)	0.38 (0.33 - 0.58)
Top Term	.018 (.013 - .023)	0.46 (0.33 - 0.58)
Bottom Term	.020 (.015 - .025)	0.58 (0.38 - 0.64)
Term Width	.027 (.023 - .031)	0.69 (0.58 - 0.79)
Gap	.085 (.081 - .089)	2.16 (2.06 - 2.26)
Approx. Weight	.012 grams	

Solderability: Excellent. Solder coating compatible with Sn60, 62 or 63 solders, provides good wetting with all types of solder attachment. All product is tested IAW Mil-Std-202, method 208.

### PACKAGING

Three packaging options are available:

- Bulk Packaging - (5000 per Bag Max.)
- Waffle Pack - (140 per Tray Max.)
- Tape & Reel - (5000 per Reel Max.)

### OPTIONS

SOTA offers a full line of component parts in the 1206 size including Military (MIL-PRF-55342 "S" level), High-Reliability (customer specified testing), and commercial grade. Available options are epoxy bondable and wire bondable terminations, custom part marking, and untrimmed resistors.

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Where Quality Isn't a Goal...It's Our Tradition

01/27/09