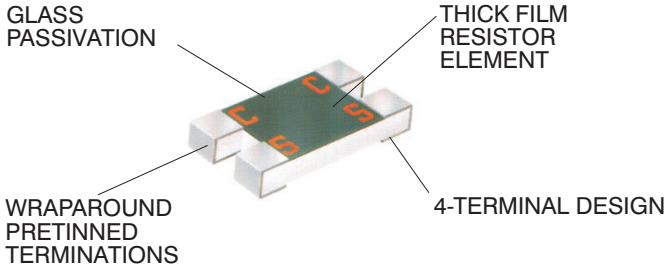


# State of the Art, Inc.

## Current Sense Chip Resistor

2010 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

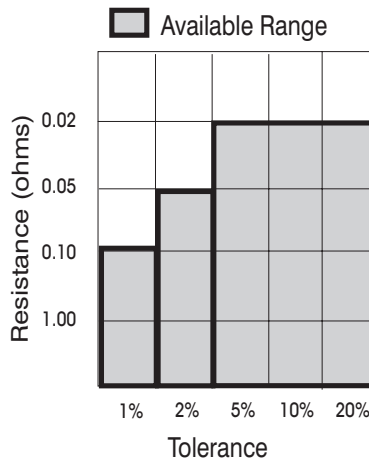
Resistance Range 0.020 Ohms -1 Ohm  
 Tolerances 1%, 2%, 5%, 10%, 20%  
 Maximum Power 1000 mW  
 Maximum Voltage 150 Volts

#### ENVIRONMENTAL PERFORMANCE \*

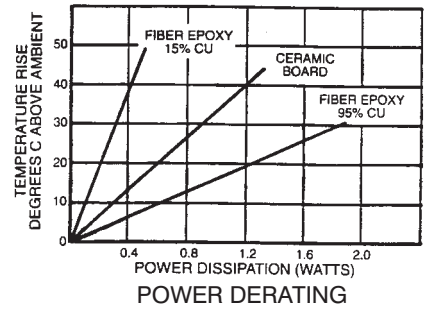
TCR (-55 to +125°C in ppm/°C) < 600 ppm  
 Thermal Shock ±0.03%  
 Low Temperature Operation ±0.02%  
 Short-time Overload ±0.02%  
 Resistance to Bonding Exposure ±0.03%  
 Moisture Resistance ±0.05%  
 High Temperature Exposure ±0.05%

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

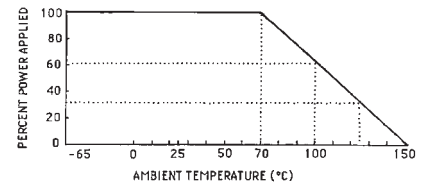
#### RESISTANCE TABLE



#### POWER DISSIPATION

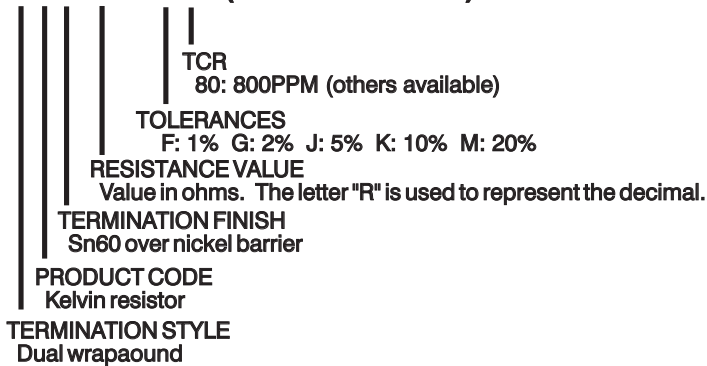


#### POWER DERATING



### PART NUMBERING

**S2010CKX0R02 J 80 (others available)**



### MECHANICAL

	INCHES	MILLIMETERS
Length	.200 (.198 - .208)	5.08 (5.03 - 5.28)
Width	.100 (.098 - .106)	2.54 (2.49 - 2.69)
Thickness	.025 (.023 - .033)	0.64 (0.58 - 0.84)
Top Term	.026 (.021 - .031)	0.66 (0.53 - 0.79)
Bottom Term	.026 (.021 - .031)	0.66 (0.53 - 0.79)
Term Width	.040 (.036 - .044)	1.02 (0.91 - 1.12)
Gap	.142 (.138 - .146)	3.61 (3.51 - 3.71)
Approx. Weight	.0323 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 - (1400 per Bag Max.)
- Waffle Pack - (60 per Tray Max.)
- Tape & Reel - (4000 per Reel Max.)

### OPTIONS

SOTA offers a full line of component parts in the 2010 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