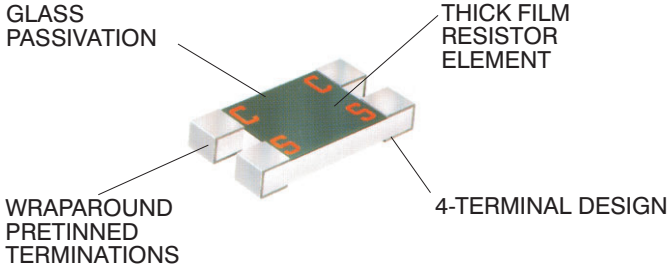


# State of the Art, Inc.

## Current Sense Chip Resistor

2512 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

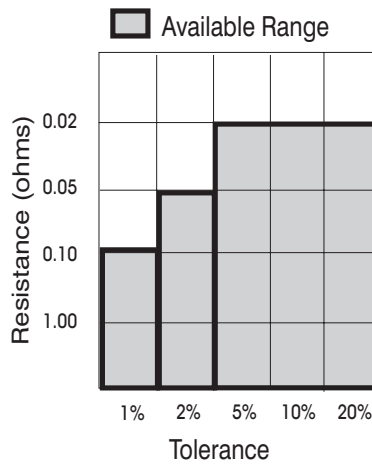
Resistance Range 0.020 Ohms -1  
 Tolerances 1%, 2%, 5%, 10%, 20%  
 Maximum Power 1500 mW  
 Maximum Voltage 200 Volts

#### ENVIRONMENTAL PERFORMANCE \*

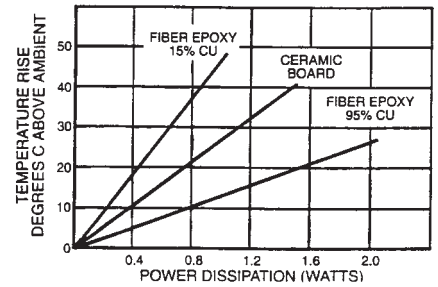
TCR (-55 to +125°C in ppm/°C) < 600 ppm  
 Thermal Shock ±0.03%  
 Low Temperature Operation ±0.02%  
 Short-time Overload ±0.02%  
 Resistance to Bonding Exposure ±0.03%  
 Moisture Resistance ±0.05%  
 High Temperature Exposure ±0.05%

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

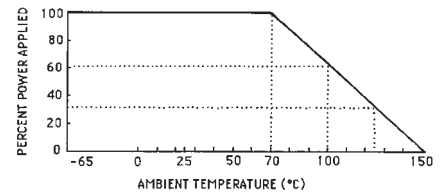
#### RESISTANCE TABLE



#### POWER DISSIPATION

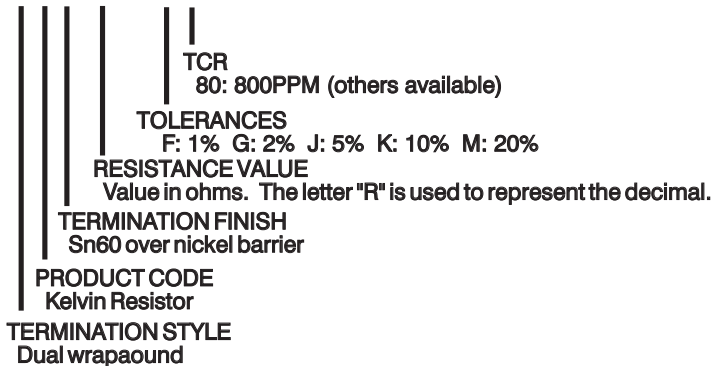


#### POWER DERATING



### PART NUMBERING

**S2512CKX0R02 J 80**



### MECHANICAL

	INCHES	MILLIMETERS
Length	.250 (.248 -.258)	6.35 (6.30 - 6.55)
Width	.120 (.118 -.126)	3.05 (3.00 - 3.20)
Thickness	.025 (.023 -.033)	0.64 (0.58 - 0.84)
Top Term	.028 (.023 -.033)	0.71 (0.58 - 0.84)
Bottom Term	.027 (.022 -.032)	0.69 (0.56 - 0.81)
Term Width	.050 (.046 -.054)	1.27 (1.17 - 1.37)
Gap	.190 (.186 -.194)	4.83 (4.72 - 4.93)
Approx. Weight	.0513 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 - (900 per Bag Max.)
- Waffle Pack - (45 per Tray Max.)
- Tape & Reel - (1800 per Reel Max.)

### OPTIONS

SOTA offers a full line of component parts in the 2512 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