



State of the Art, Inc.

Current Sense Chip Resistor

2010 size, Surface Mount, 4-Terminal Kelvin

GLASS
PASSIVATION

THICK FILM
RESISTOR
ELEMENT

WRAPAROUND
PRETINNED
TERMINATIONS

4-TERMINAL DESIGN

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
Tolerances
Maximum Power
Maximum Voltage

0.020 Ohms -1 Ohm
1%, 2%, 5%, 10%, 20%
1000 mW
150 Volts

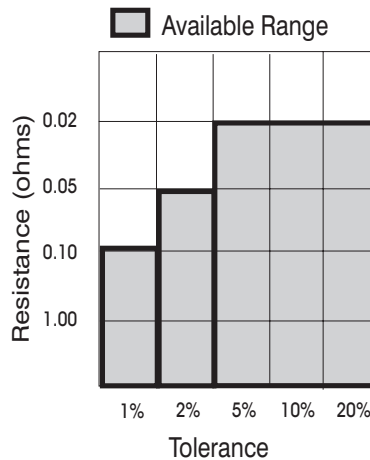
ENVIRONMENTAL PERFORMANCE *

TCR (-55 to +125°C in ppm/°C)
Thermal Shock
Low Temperature Operation
Short-time Overload
Resistance to Bonding Exposure
Moisture Resistance
High Temperature Exposure

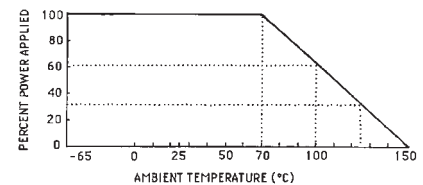
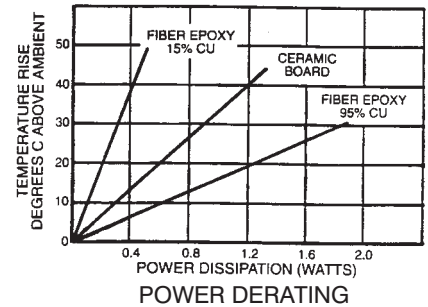
< 600 ppm
±0.03%
±0.02%
±0.02%
±0.03%
±0.05%
±0.05%

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

RESISTANCE TABLE

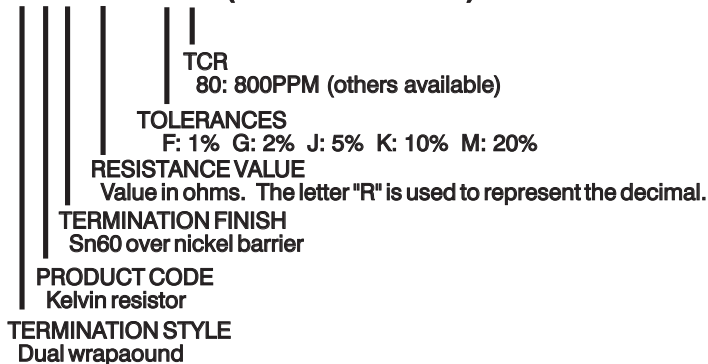


POWER DISSIPATION



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

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