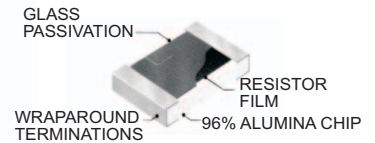




# State of the Art, Inc.

## 2010 Thick Film Chip Resistor

Standard Grade, Wraparound



### PERFORMANCE CHARACTERISTICS

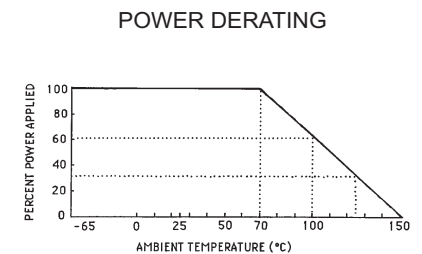
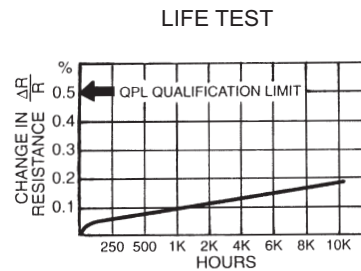
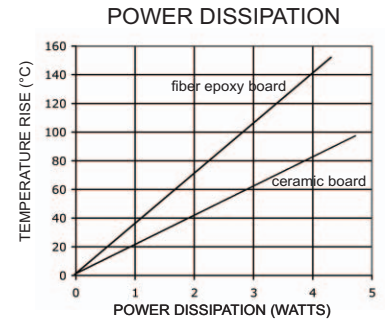
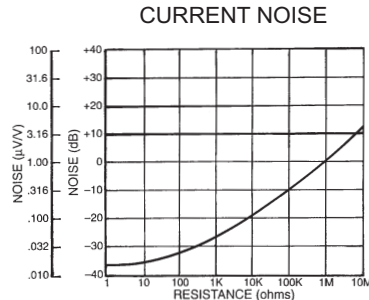
Resistance Range	1Ω - 40MΩ
Tolerances (1)	0.5%, 1%, 2%, 5%, 10%
TCR	±100, ±200, ±300 ppm
Thermal Resistance	48.4°C/W
Maximum Power	1000 mW
Maximum Voltage	150 Volts

(1)+/- 0.5% limited availability

### ENVIRONMENTAL PERFORMANCE (2)

Thermal Shock	±0.03%
Low Temperature Operation	±0.03%
Short-time Overload	±0.03%
Resistance to Bonding Exposure	±0.03%
Moisture Resistance	±0.05%
High Temperature Exposure	±0.05%
Life Test	See Chart

(2)Typical resistance change, test methods and criteria per MIL-PRF-55342.



### PART NUMBERING

#### S 2010 C P X 150 J 20 - TR

PACKAGING CODE: - TR = Tape/Reel - W = Waffle Carrier (Default packaging is Bulk)

TEMPERATURE CHARACTERISTIC: 10: ±100 ppm 20: ±200 ppm 30: ±300 ppm

TOLERANCE: F: 1% G: 2% J: 5% K: 10% M: 20%

#### RESISTANCE VALUE:

Four digits are used for tolerances of 1% or lower, three digits are used above 1%. Leading digits are significant while the last digit specifies the number of zeros to add. The letter "R" is used to represent the decimal for fractional ohmic values. Example: 5R6 is 5.6 ohms.

TERMINATION FINISH: X: Sn60 over Nickel (Solderable) C: Silver bearing (Epoxy bondable-RoHS) G: Gold (Epoxy bondable-RoHS) Y: Silver over Nickel (Solderable -RoHS) Z: Gold over Nickel (Solderable-RoHS)

PRODUCT DESIGNATION: P: Thick film on alumina U: Untrimmed alumina (10% & 20% tolerance only)

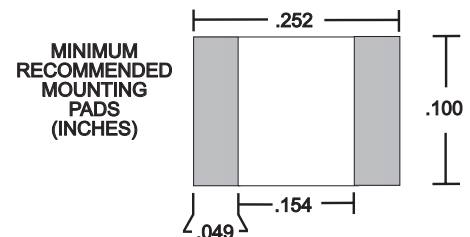
TERMINATION TYPE: C: Wraparound termination

SIZE CODE

GRADE: S: Standard Production H: High Reliability (For Screening options, contact the factory)

### MECHANICAL

	INCHES	MILLIMETERS
Length	.202 (.200 - .210)	5.13 (5.08 - 5.33)
Width	.094 (.093 - .100)	2.38 (2.36 - 2.54)
Thickness	.028 (.023 - .033)	0.71 (0.58 - 0.84)
Top Term	.020 (.015 - .025)	0.51 (0.38 - 0.64)
Bottom Term	.019 (.015 - .025)	0.48 (0.38 - 0.64)
Gap	.164 (.160 - .168)	4.17 (4.06 - 4.27)
Approx. Weight	.0323 grams	



\*Specifications subject to change without notice.\*

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02/08/08