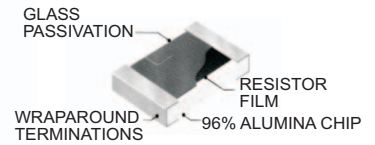




# State of the Art, Inc.

## 1505 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	90.2°C/W
Maximum Power	330 mW
Maximum Voltage	125 Volts

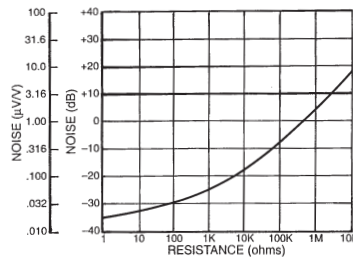
(1)+/- 0.5% limited availability

### ENVIRONMENTAL PERFORMANCE (2)

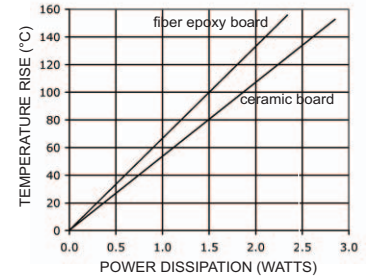
Thermal Shock	±0.03%
Low Temperature Operation	±0.03%
Short-time Overload	±0.03%
Resistance to Bonding Exposure	±0.03%
Moisture Resistance	±0.05%
High Temperature Exposure	±0.05%
Life Test	See Chart

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

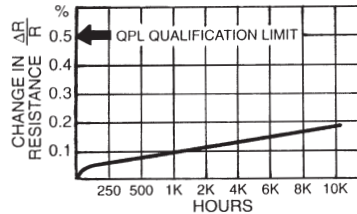
CURRENT NOISE



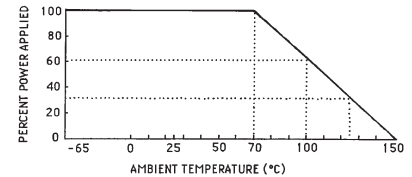
POWER DISSIPATION



LIFE TEST



POWER DERATING



### PART NUMBERING

#### S 1505 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)

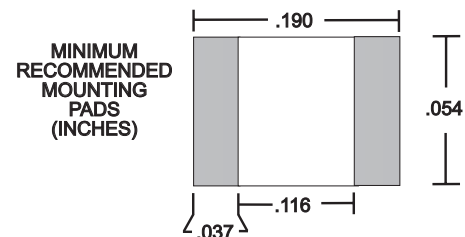
TERMINATION TYPE: C: Wraparound termination

SIZE CODE

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

### MECHANICAL

	INCHES	MILLIMETERS
Length	.150 (.148 - .158)	3.81 (3.76 - 4.01)
Width	.048 (.046 - .054)	1.22 (1.17 - 1.37)
Thickness	.023 (.018 - .028)	0.58 (0.46 - 0.71)
Top Term	.015 (.010 - .020)	0.38 (0.25 - 0.51)
Bottom Term	.014 (.010 - .020)	0.36 (0.25 - 0.51)
Gap	.122 (.118 - .126)	3.10 (3.00 - 3.20)
Approx. Weight	.0097 grams	



\*Specifications subject to change without notice.\*

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