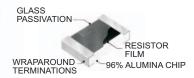


State of the Art, Inc. 0505 Thick Film Chip Resistor

Standard Grade, Wraparound



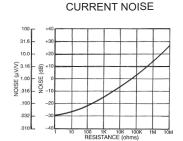
PERFORMANCE CHARACTERISTICS

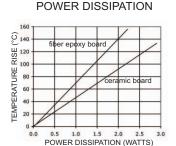
 $\begin{array}{llll} \text{Resistance Range} & 1\Omega - 40 \text{M}\Omega \\ \hline \text{Tolerances (1)} & 1\%, 2\%, 5\%, 10\% \\ \hline \text{TCR} & \pm 100, \pm 200, \pm 300 \text{ ppm} \\ \hline \text{Thermal Resistance} & 45.5^{\circ}\text{C/W} \\ \hline \text{Maximum Power} & 125 \text{ mW} \\ \hline \text{Maximum Voltage} & 40 \text{ Volts} \\ \end{array}$

ENVIRONMENTAL PERFORMANCE (1)

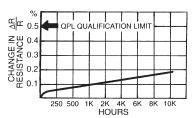
Thermal Shock	±0.03%
Low Temperature Operation	±0.03%
Short-time Overload	±0.03%
Resistance to Bonding Exposure	±0.03%
Moisture Resistance	±0.05%
High Temperature Exposure	±0.05%
Life Test	See Char

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

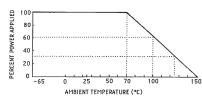




LIFE TEST







PART NUMBERING

S 0505 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
 .052 (.050 - .060) 1.32 (1.27 - 1.52)

 Width
 .048 (.046 - .054) 1.22 (1.17 - 1.37)

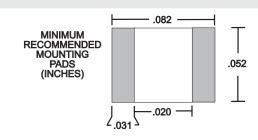
 Thickness
 .018 (.013 - .023) 0.46 (0.33 - 0.58)

 Top Term
 .009 (.005 - .015) 0.22 (0.13 - 0.38)

 Bottom Term
 .014 (.010 - .020) 0.36 (0.25 - 0.51)

 Gap
 .024 (.020 - .028) 0.61 (0.51 - 0.71)

 Approx. Weight
 .00315 grams



"Specifications subject to change without notice."

STATE OF THE ART, INC. 2470 Fox Hill Road, State College, PA 16803-1797
Phone (814) 355-8004 Fax (814) 355-2714 Toll Free 1-800-458-3401

www.resistor.com