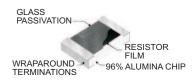


State of the Art, Inc. 0603 Thick Film Chip Resistor

Standard Grade, Wraparound



PERFORMANCE CHARACTERISTICS

 $\begin{array}{lll} \text{Resistance Range} & 1\Omega - 40 \text{M}\Omega \\ \hline \text{Tolerances (1)} & 0.5\%, 1\%, 2\%, 5\%, 10\% \\ \hline \text{TCR} & \pm 100, \pm 200, \pm 300 \text{ ppm} \\ \hline \text{Thermal Resistance} & 78.4^{\circ}\text{C/W} \\ \hline \text{Maximum Power} & 100 \text{ mW} \\ \hline \text{Maximum Voltage} & 45 \text{ Volts} \\ \end{array}$

(1)+/- 0.5% limited availability

ENVIRONMENTAL PERFORMANCE (2)

 Thermal Shock
 ±0.03%

 Low Temperature Operation
 ±0.03%

 Short-time Overload
 ±0.03%

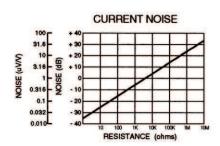
 Resistance to Bonding Exposure
 ±0.03%

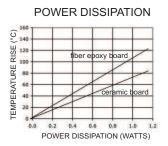
 Moisture Resistance
 ±0.05%

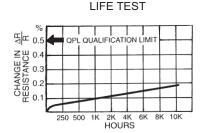
 High Temperature Exposure
 ±0.05%

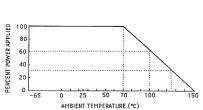
 Life Test
 See Chart

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









POWER DERATING

PART NUMBERING

S 0603 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 lobbs

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)

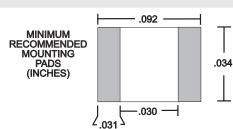
TERMINATION TYPE: C: Wraparound termination

SIZE CODE

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

MECHANICAL

INCHES MILLIMETERS .062 (.060 - .070) 1.58 .032 (.030 - .037) 0.81 Length Width (1.52 - 1.78)(0.76 - 0.94) (0.33 - 0.58)**Thickness** .018 (.013 - .023) 0.46 (0.18 - 0.43) (0.25 - 0.51) (0.76 - 0.97) .010 (.007 - .017) 0.25 .014 (.010 - .020) 0.36 Top Term **Bottom Term** .034 (.030 - .038) 0.86 Approx. Weight .00235 grams



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**

[&]quot;Specifications subject to change without notice."