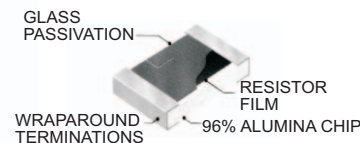




# State of the Art, Inc.

## 0705 Thick Film Chip Resistor

Standard Grade, Wraparound



### PERFORMANCE CHARACTERISTICS

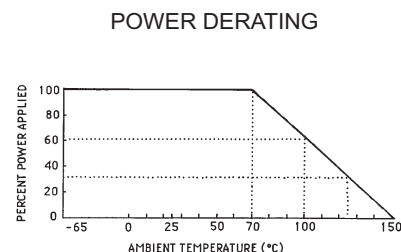
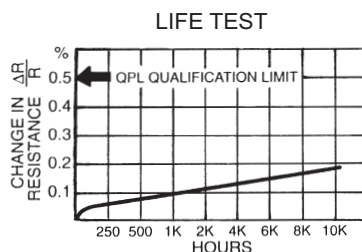
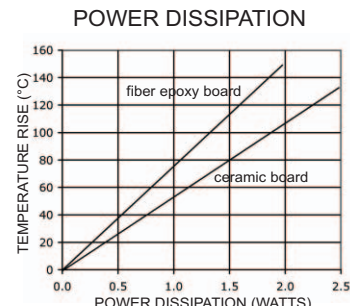
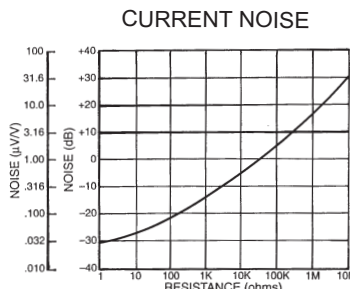
|                    |                       |
|--------------------|-----------------------|
| Resistance Range   | 1Ω - 40MΩ             |
| Tolerances (1)     | 0.5%, 1%, 2%, 5%, 10% |
| TCR                | ±100, ±200, ±300 ppm  |
| Thermal Resistance | 62.9°C/W              |
| Maximum Power      | 200 mW                |
| Maximum Voltage    | 50 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 0705 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)

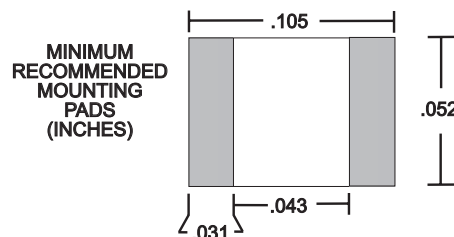
TERMINATION TYPE: C: Wraparound termination

#### SIZE CODE

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

### MECHANICAL

|                | INCHES             | MILLIMETERS        |
|----------------|--------------------|--------------------|
| Length         | .075 (.074 - .083) | 1.91 (1.88 - 2.11) |
| Width          | .048 (.046 - .054) | 1.22 (1.17 - 1.37) |
| Thickness      | .018 (.015 - .023) | 0.46 (0.38 - 0.58) |
| Top Term       | .012 (.008 - .024) | 0.31 (0.20 - 0.61) |
| Bottom Term    | .014 (.010 - .020) | 0.36 (0.25 - 0.51) |
| Gap            | .047 (.043 - .051) | 1.19 (1.09 - 1.30) |
| Approx. Weight | .00405 grams       |                    |



\*Specifications subject to change without notice.\*

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