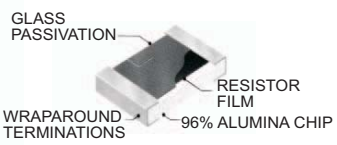
# State of the Art, Inc.

## 2512 High Voltage Chip Resistor

### Thick Film, Solderable, Surface Mount Resistor




## PERFORMANCE CHARACTERISTICS

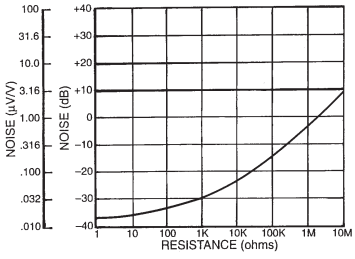
| | |
|---|---|
| **Resistance Range** | **22 kΩ - 100 MΩ** |
| **Tolerance** | **±1%, ±2%, ±5%, ±10%** |
| **TCR** | **±100, ±200, ±300 ppm/°C** |
| **Thermal Resistance** | **44.5 °C/W** |
| **Maximum Power** | **1.5 W** |
| **Maximum Voltage** | **1200 V** |

### ENVIRONMENTAL PERFORMANCE (2)

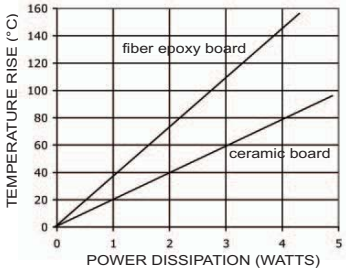
| | |
|---|---|
| Thermal Shock | ±0.03% |
| Low Temperature Operation | ±0.03% |
| Short-time Overload | ±0.03% |
| Resistance to Bonding Exposure | ±0.03% |
| Moisture Resistance | ±0.05% |
| High Temperature Exposure | ±0.05% |
| Life Test | See Chart |

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

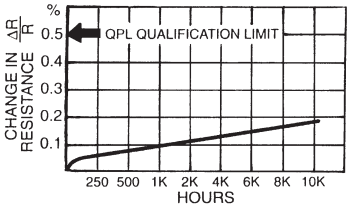
CURRENT NOISE



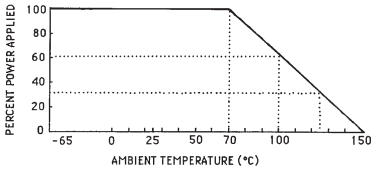

POWER DISSIPATION




LIFE TEST




POWER DERATING




## PART NUMBERING

**S2512CVX1006F30 -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 (40% Pb) Solder Over Nickel Barrier, Y: Silver Over Nickel Barrier (RoHS)

PRODUCT DESIGNATION: V: High Voltage

TERMINATION TYPE: C: Wraparound termination

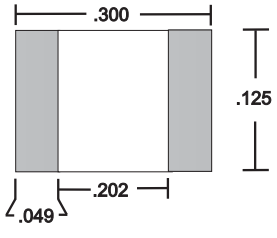
SIZE CODE

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

## MECHANICAL

| | INCHES | MILLIMETERS |
|---|---|---|
| Length | .250 (.250 - .258) | 6.35 (6.35 - 6.55) |
| Width | .119 (.119 - .125) | 3.02 (3.02 - 3.18) |
| 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 | .212 (.208 - .216) | 5.39 (5.28 - 5.49) |
| Approx. Weight | .0513 grams | |

MINIMUM RECOMMENDED MOUNTING PADS (INCHES)




*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**

120319