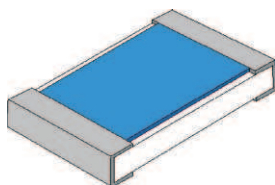




# State of the Art, Inc.

## M32159/04 Zero Ohm Chip Resistor

Surface Mount, Jumper



### FEATURES

- Operating temperature range : -55° C to +150° C
- MIL-PRF-55342 "S" level qualified manufacturer
- Solderable (termination material B) termination pretinned with SN60 over nickel barrier suitable for solder reflow vapor phase or wave solder attachment.
- Epoxy Bondable terminations available with silver based (C), platinum gold (U) and gold (G) finishes for epoxy attachment.

### PERFORMANCE

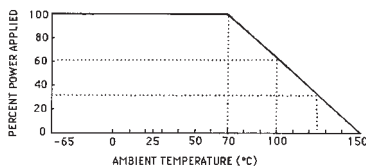
|                      |         |         |         |
|----------------------|---------|---------|---------|
| Termination Material | B/G     | C       | U       |
| Maximum Resistance   | 0.035 Ω | 0.050 Ω | 0.175 Ω |
| Maximum Current      | 2.1A    | 1.7A    | 0.93A   |

Maximum Power Rating 150 mW

### ENVIRONMENTAL PERFORMANCE

|                                |                             |
|--------------------------------|-----------------------------|
| Thermal Shock                  | Not to exceed maximum value |
| Low Temperature Operation      | "                           |
| Short-time Overload            | "                           |
| Resistance to Bonding Exposure | "                           |
| Moisture Resistance            | "                           |
| High Temperature Exposure      | "                           |
| Life                           | "                           |

### POWER DERATING



Percentage of power to be applied at various ambient temperatures. Full rated power to 70°, linearly derated to 0 power at 150°C.

### PART NUMBERING

**M32159 B 04 M**

PRODUCT LEVEL DESIGNATOR\*  
M: Military C: Industrial T: Space Level

Size Code: RCZ1505  
/04 = 0.150 X 0.050 X 0.015

Termination Material:  
B: Solderable  
C: Silver based epoxy bondable  
G: Gold epoxy bondable  
U: Pt Au epoxy bondable

### PRODUCT LEVELS

All product levels are based on the same design. Level C is a Non-Established Reliability part requiring no group A, B or C testing. Military product level M is subject to group A, B and C testing per MIL-PRF-32159. Space product level T requires group A and B tests performed on a production lot basis, including 100% power conditioning.

### MECHANICAL

|                | INCHES             | MILIMETERS         |
|----------------|--------------------|--------------------|
| Length         | .150 (.148 - .162) | 3.81 (3.76 - 4.11) |
| Width          | .048 (.045 - .055) | 1.22 (1.14 - 1.40) |
| Thickness      | .023 (.015 - .033) | 0.58 (0.38 - 0.84) |
| 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        |                    |

Solderability: (Termination material (B) Solder coating compatible with Sn60, 62 or 63 solders, provides good wetting with all types of solder attachment. All product is tested IAW Mil-Std-202, method 208, including 8 hour steam aging.

### PACKAGING

Two packaging options are available:

- Waffle Pack - (128 per Tray Max.)
- Tape & Reel - (5000 per 8" Inch Reel Max.)

### OPTIONS

SOTA offers a full line of thick & thin film resistors in the 1505 size including Standard Grade, High-Reliability (customer specified testing). Custom part marking is available.

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02/13/09

\*Specifications subject to change without notice.\*

Where Quality Isn't a Goal...It's Our Tradition