

**SINGLE-PHASE GLASS PASSIVATED  
 SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes**

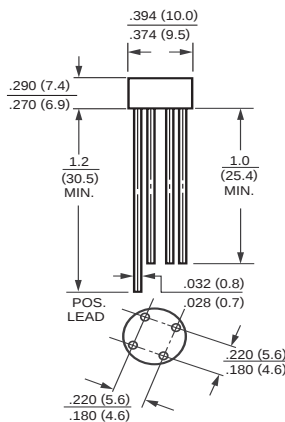
**FEATURES**

- \* Reverse voltage to 1000v
- \* Surge overload ratings to 50 amperes peak
- \* Good for printed circuit board assembly
- \* Mounting position: Any
- \* Weight: 1.88 grams
- \* Silver-plated copper leads

**MECHANICAL DATA**

- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**RC-2**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

| RATINGS                                                                                           | SYMBOL           | RC201        | RC202 | RC203 | RC204 | RC205 | RC206 | RC207 | UNITS |
|---------------------------------------------------------------------------------------------------|------------------|--------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                            | V <sub>RRM</sub> | 50           | 100   | 200   | 400   | 600   | 800   | 1000  | Volts |
| Maximum RMS Bridge Input Voltage                                                                  | V <sub>RMS</sub> | 35           | 70    | 140   | 280   | 420   | 560   | 700   | Volts |
| Maximum DC Blocking Voltage                                                                       | V <sub>DC</sub>  | 50           | 100   | 200   | 400   | 600   | 800   | 1000  | Volts |
| Maximum Average Forward Output Current at TA = 25°C                                               | I <sub>O</sub>   | 2.0          |       |       |       |       |       |       | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub> | 50           |       |       |       |       |       |       | Amps  |
| Typical Thermal Resistance from junction to ambient                                               | R θ J A          | 40           |       |       |       |       |       |       | °C/W  |
| Typical Thermal Resistance from junction to case                                                  | R θ J C          | 12           |       |       |       |       |       |       |       |
| Operating Temperature Range                                                                       | T <sub>J</sub>   | -55 to + 150 |       |       |       |       |       |       | °C    |
| Storage Temperature Range                                                                         | T <sub>STG</sub> | -55 to + 150 |       |       |       |       |       |       | °C    |

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS                                                  | SYMBOL | RC201 | RC202 | RC203 | RC204 | RC205 | RC206 | RC207 | UNITS |
|------------------------------------------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 2.0A DC       | VF     | 1.1   |       |       |       |       |       |       | Volts |
| Maximum Reverse Current at Rated DC Blocking Voltage per element | IR     | 5.0   |       |       |       |       |       |       | uAmps |
|                                                                  |        | 0.5   |       |       |       |       |       |       | mAmps |

Note: 1. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2005-3

REV:A

# RATING AND CHARACTERISTIC CURVES ( RC201 THRU RC207 )

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT

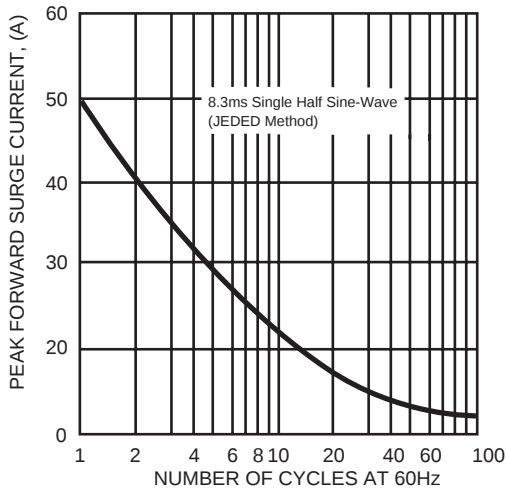


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

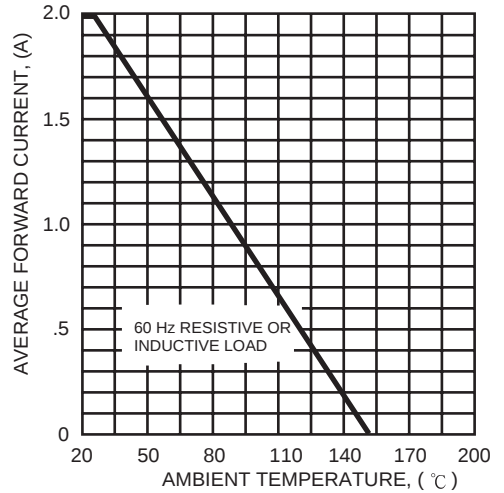


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

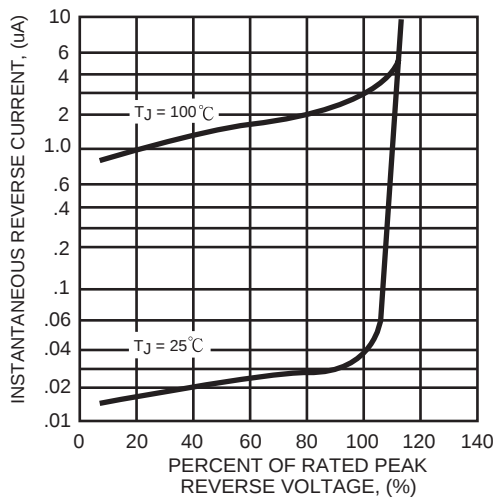


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

