

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

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes

FEATURES

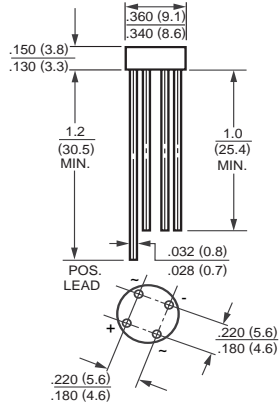
- * High reverse voltage to 1000v
- * Surge overload ratings to 50 amperes peak
- * Good for printed circuit board assembly
- * Weight: 1.04 grams
- * Silver-plated copper leads

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-0



RB-15



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 | RB151 | RB152 | RB153 | RB154 | RB155 | RB156 | RB157 | UNITS |
|---|--------|--------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current at TA = 25°C | Io | 1.5 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 50 | | | | | | | Amps |
| Typical Thermal Resistance (Note 1) | R θJA | 36 | | | | | | | °C/W |
| | R θJC | 12 | | | | | | | |
| Operating Temperature Range | TJ | -55 to + 150 | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RB151 | RB152 | RB153 | RB154 | RB155 | RB156 | RB157 | UNITS |
|--|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.0A DC | VF | 1.0 | | | | | | | Volts |
| Maximum Reverse Current at Rated DC Blocking Voltage per element | @ TA = 25°C | 5.0 | | | | | | | uAmps |
| | @ TA = 100°C | 1 | | | | | | | mAmps |

NOTE:1. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounting.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTIC CURVES (RB151 THRU RB157)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

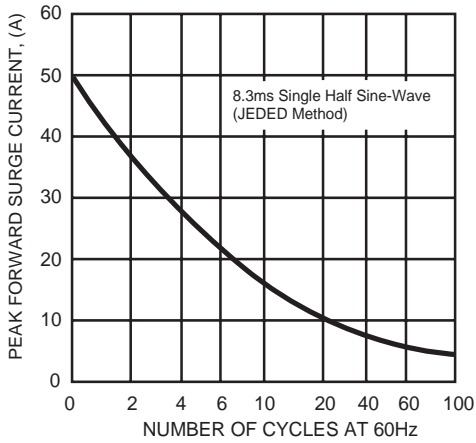


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

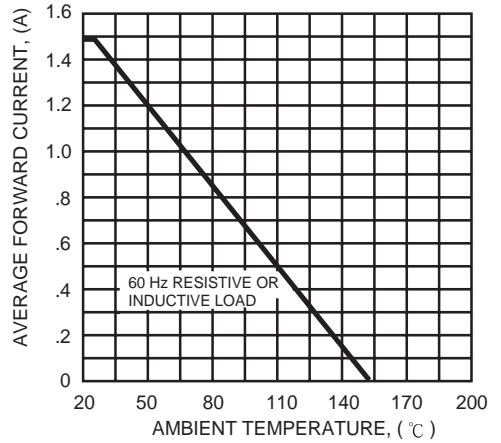


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

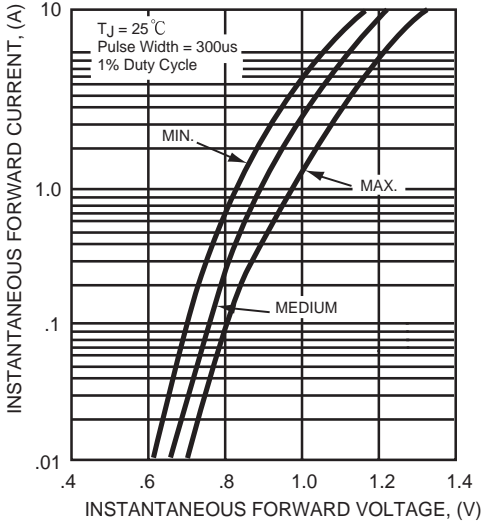
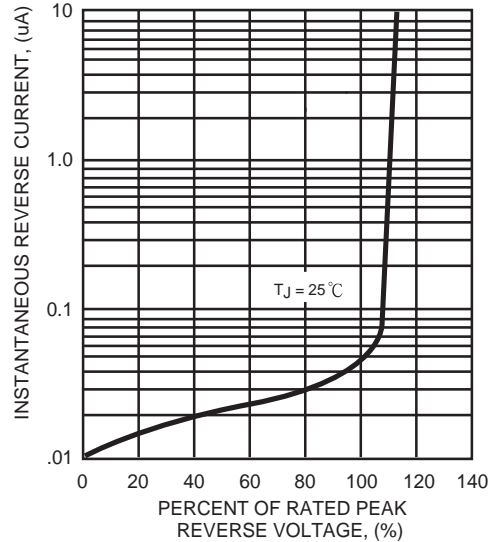


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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