

## 1.5 AMP SILICON BRIDGE RECTIFIERS

### FEATURES

- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 50 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications
- **UL RECOGNIZED - FILE #E141956**

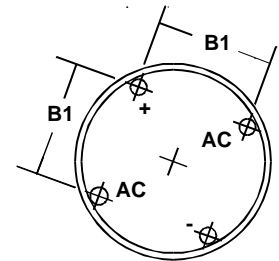
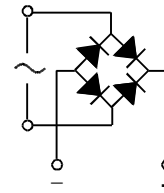
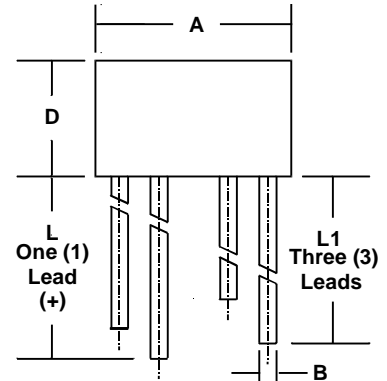
### MECHANICAL DATA

- Case: Molded plastic, U/L Flammability Rating 94V-0
- Terminals: Round silver plated pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on case
- Mounting Position: Any
- Weight: 0.05 Ounces (1.3 Grams)

### MECHANICAL SPECIFICATION

ACTUAL SIZE OF  
WB PACKAGE

SERIES WB150 - WB1510



| SYM | MILLIMETERS |      | INCHES |       |
|-----|-------------|------|--------|-------|
|     | MIN         | MAX  | MIN    | MAX   |
| A   | 8.6         | 8.89 | 0.340  | 0.350 |
| B   | 0.76        | 0.81 | 0.030  | 0.032 |
| B1  | 4.6         | 5.6  | 0.180  | 0.220 |
| D   | 5.1         | 5.6  | 0.200  | 0.220 |
| L   | 30.5        | n/a  | 1.20   | n/a   |
| L1  | 25.4        | n/a  | 1.0    | n/a   |

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

| PARAMETER (TEST CONDITIONS)   | SYMBOL                            | RATINGS     |        |        |        |        |        |         | UNITS |
|---|-----------------------------------|-------------|--------|--------|--------|--------|--------|---------|-------|
|   |                                   | WB 150      | WB 151 | WB 152 | WB 154 | WB 156 | WB 158 | WB 1510 |       |
| Series Number   |                                   |             |        |        |        |        |        |         |       |
| Maximum DC Blocking Voltage   | V <sub>RM</sub>                   | 50          | 100    | 200    | 400    | 600    | 800    | 1000    | VOLTS |
| Maximum RMS Voltage   | V <sub>RMS</sub>                  | 35          | 70     | 140    | 280    | 420    | 560    | 700     |       |
| Maximum Peak Recurrent Reverse Voltage  | V <sub>RRM</sub>                  | 50          | 100    | 200    | 400    | 600    | 800    | 1000    |       |
| Average Forward Rectified Current @ T <sub>A</sub> = 25 °C                          | I <sub>O</sub>                    | 1.5         |        |        |        |        |        |         | AMPS  |
| Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load) | I <sub>FSM</sub>                  | 50          |        |        |        |        |        |         |       |
| Maximum Forward Voltage (Per Diode) at 1 Amp DC                                     | V <sub>FM</sub>                   | 1.0         |        |        |        |        |        |         | VOLTS |
| Maximum Average DC Reverse Current @ T <sub>A</sub> = 25 °C                         | I <sub>RM</sub>                   | 10          |        |        |        |        |        |         | μA    |
| At Rated DC Blocking Voltage @ T <sub>A</sub> = 100 °C                              |                                   | 1           |        |        |        |        |        |         | mA    |
| Maximum Thermal Resistance, Junction to Ambient (Note 1)                            | R <sub>θJA</sub>                  | 35          |        |        |        |        |        |         | °C/W  |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 |        |        |        |        |        |         | °C    |

NOTES: (1) Thermal resistance from junction to ambient with bridge mounted on PC Board with 0.2x0.2 in copper pads and 0.375 (9.5mm) lead length