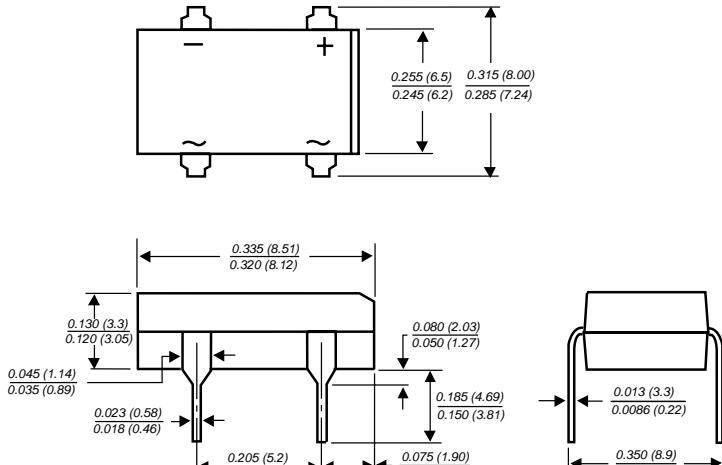




Case Style DFM

## Glass Passivated Single-Phase Bridge Rectifier

Rectifier Reverse Voltage 65 and 600 V  
Rectifier Forward Current 0.9 A



Dimensions in inches and (millimeters)

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Surge overload rating of 45 Amperes peak
- Ideal for printed circuit boards
- High temperature soldering guaranteed:  
260°C/10 seconds, at 5lbs. (2.3kg) tension

### Mechanical Data

**Case:** Molded plastic body over passivated junctions

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols as marked on body

**Mounting Position:** Any

**Weight:** 0.04 ounce, 1.0 gram

### Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

|   | SYMBOLS                              | B40<br>C800DM | B80<br>C800DM | B125<br>C800DM | B250<br>C800DM | B380<br>C800DM | UNITS              |
|---|--------------------------------------|---------------|---------------|----------------|----------------|----------------|--------------------|
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>                     | 65            | 125           | 200            | 400            | 600            | V                  |
| Maximum RMS input voltage R + C-load  | V <sub>RMS</sub>                     | 40            | 80            | 125            | 250            | 380            | V                  |
| Maximum average forward output current for free air operation at T <sub>A</sub> =45°C<br>R + L-load<br>C-load | I <sub>F(AV)</sub>                   |               |               | 0.9            |                |                | A                  |
|   |                                      |               |               | 0.8            |                |                |                    |
| Maximum DC blocking voltage   | V <sub>DC</sub>                      | 65            | 125           | 200            | 400            | 600            | V                  |
| Maximum peak working voltage  | V <sub>RWM</sub>                     | 90            | 180           | 300            | 600            | 900            | V                  |
| Maximum non-repetitive peak voltage   | V <sub>RSR</sub>                     | 100           | 200           | 350            | 650            | 1000           | V                  |
| Maximum repetitive peak forward surge current<br>single sine wave on rated load at T <sub>J</sub> =125°C      | I <sub>FRM</sub>                     |               |               | 10             |                |                | A                  |
|   | I <sub>FSM</sub>                     |               |               | 45             |                |                | A                  |
| Rating for fusing at T <sub>J</sub> =125°C (t<100ms)  | I <sup>2</sup> t                     |               |               | 10             |                |                | A <sup>2</sup> sec |
| Minimum series resistor C-load at V <sub>RMS</sub> = ±10%   | R <sub>T</sub>                       | 1.0           | 2.0           | 4.0            | 8.0            | 12             | Ω                  |
| Maximum load capacitance<br>+50%<br>-10%  | C <sub>L</sub>                       | 5000          | 2500          | 1000           | 500            | 200            | μF                 |
| Typical thermal resistance per leg (NOTE 1)   | R <sub>θJA</sub><br>R <sub>θJL</sub> |               |               | 40             |                |                | °C/W               |
|   |                                      |               |               | 15             |                |                |                    |
| Operating junction temperature range  | T <sub>J</sub>                       |               |               | -40 to +125    |                |                | °C                 |
| Storage temperature range   | T <sub>STG</sub>                     |               |               | -40 to +150    |                |                | °C                 |

### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

|  | SYMBOLS        | B40<br>C800DM | B80<br>C800DM | B125<br>C800DM | B250<br>C800DM | B380<br>C800DM | UNITS |
|--|----------------|---------------|---------------|----------------|----------------|----------------|-------|
| Maximum instantaneous forward voltage drop per leg at 0.9A       | V <sub>F</sub> |               |               | 1.0            |                |                | V     |
| Maximum reverse current at rated repetitive peak voltage per leg | I <sub>R</sub> |               |               | 10             |                |                | μA    |

**Notes:** (1) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.5 x 0.5" (13 x 13mm) copper pads

## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

