

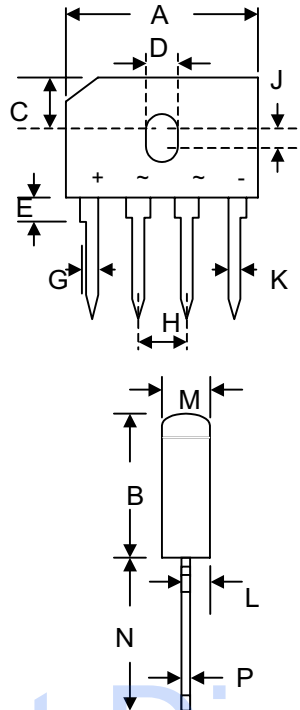
**Data Sheet 1333 Rev.A**

**Features**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E223064

**Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| GBU   |       |       |         |       |
|-------|-------|-------|---------|-------|
| Dim   | Min   | Max   | Min     | Max   |
| A     | 21.8  | 22.3  | 0.858   | 0.878 |
| B     | 18.30 | 18.80 | 0.720   | 0.740 |
| C     | 7.40  | 7.90  | 0.291   | 0.311 |
| D     | 3.50  | 4.10  | 0.138   | 0.161 |
| E     | 1.52  | 2.03  | 0.060   | 0.080 |
| G     | 2.16  | 2.54  | 0.085   | 0.1   |
| H     | 4.83  | 5.33  | 0.190   | 0.210 |
| J     | 1.65  | 2.16  | 0.065   | 0.085 |
| K     | 1.65  | 2.03  | 0.065   | 0.080 |
| L     | 0.76  | 1.02  | 0.030   | 0.040 |
| M     | 3.30  | 3.56  | 0.130   | 0.140 |
| N     | 17.50 | 18.00 | 0.689   | 0.709 |
| P     | 0.46  | 0.56  | 0.018   | 0.022 |
| In mm |       |       | In inch |       |

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic  | Symbol   | GBU4A       | GBU4B | GBU4D | GBU4G | GBU4J | GBU4K | Unit             |
|---|--|-------------|-------|-------|-------|-------|-------|------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 50          | 100   | 200   | 400   | 600   | 800   | V                |
| RMS Reverse Voltage   | V <sub>R(RMS)</sub>                                    | 35          | 70    | 140   | 280   | 420   | 560   | V                |
| Average Rectified Output Current<br>@T <sub>C</sub> = 100°C<br>@T <sub>A</sub> = 40°C                                 | I <sub>O</sub>   | 4.0<br>3.0  |       |       |       |       |       | A                |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | I <sub>FSM</sub>                                       | 150         |       |       |       |       |       | A                |
| I <sup>2</sup> t Rating for Fusing (t < 8.35ms)   | I <sup>2</sup> t                                       | 93          |       |       |       |       |       | A <sup>2</sup> s |
| Forward Voltage (per element)<br>@I <sub>F</sub> = 4.0A   | V <sub>FM</sub>  | 1.0         |       |       |       |       |       | V                |
| Peak Reverse Current<br>At Rated DC Blocking Voltage<br>@T <sub>A</sub> = 25°C<br>@T <sub>C</sub> = 100°C             | I <sub>R</sub>   | 5.0<br>500  |       |       |       |       |       | μA               |
| Typical Thermal Resistance (per leg) (Note 1)   | R <sub>θJA</sub>                                       | 19          |       |       |       |       |       | K/W              |
| Typical Thermal Resistance (per leg) (Note 2)   | R <sub>θJC</sub>                                       | 4.0         |       |       |       |       |       | K/W              |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub>                      | -55 to +150 |       |       |       |       |       | °C               |

Note: 1. Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pads.  
2. Thermal resistance junction to case, mounted on 5.0 x 4.0 x 0.8cm thick AL plate.

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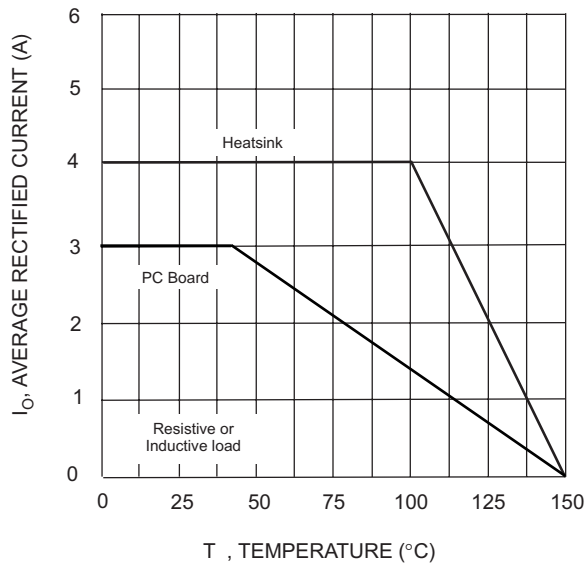


Fig. 1 Forward Current Derating Curve

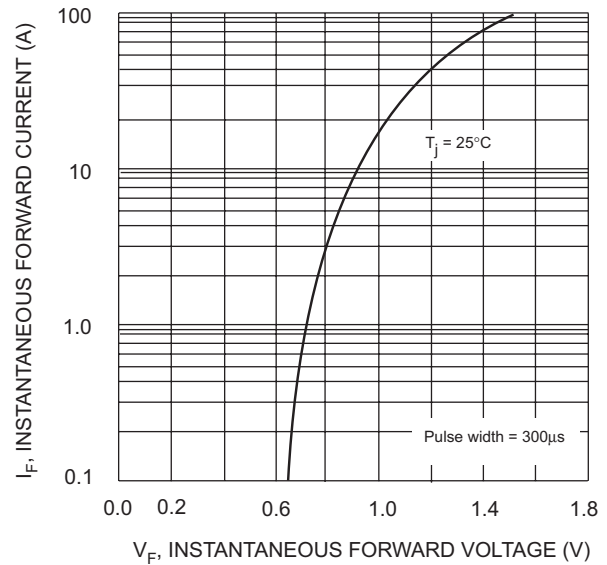


Fig. 2 Typical Fwd Characteristics, per element

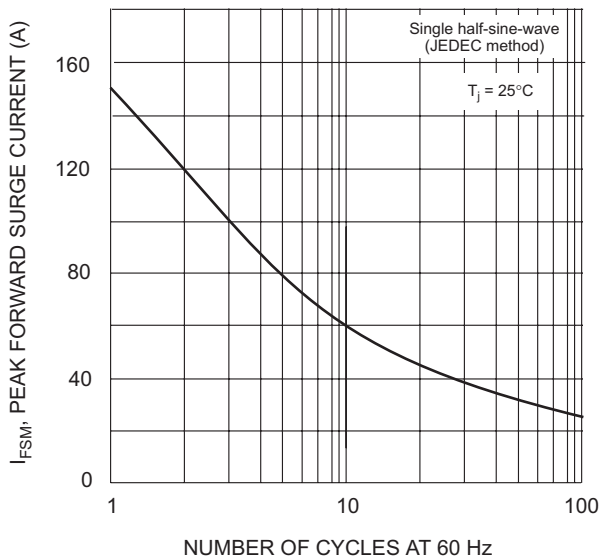


Fig. 3 Maximum Non-Repetitive Surge Current

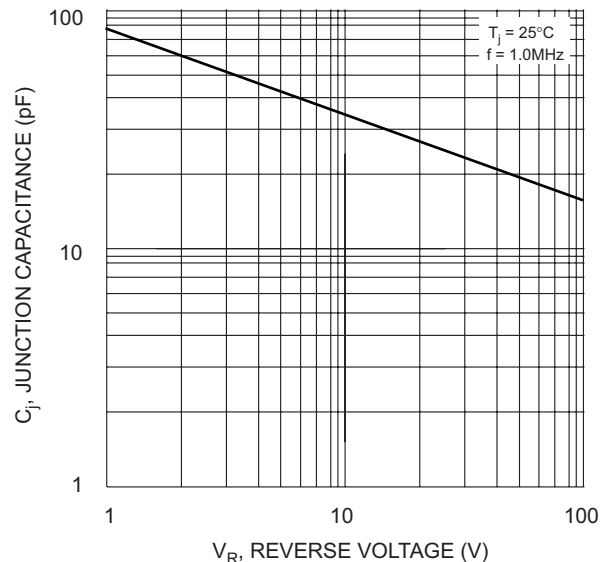


Fig. 4 Typical Junction Capacitance

**TECHNICAL DATA**

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