

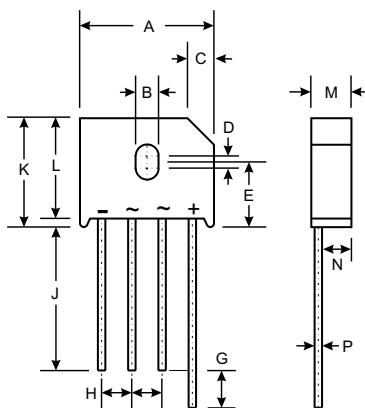
### Features

- Low Forward Voltage Drop, High Capability
- Surge Overload Rating to 300A Peak
- Ideal for Printed Circuit Board Applications
- Case to Terminal Isolation Voltage 1500V
- Plastic Material: UL Flammability Classification Rating 94V-0
- UL Listed Under Recognized Component Index, File Number E95060

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Weight: 8.0 grams (approx.)
- Marking: Type Number

**NOT RECOMMENDED FOR NEW DESIGN**  
**USE GBU8005 - GBU810**



| PBU                  |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 22.70 | 23.70 |
| B                    | 3.80  | 4.10  |
| C                    | 4.20  | 4.70  |
| D                    | 1.70  | 2.20  |
| E                    | 10.30 | 11.30 |
| G                    | 4.50  | 6.80  |
| H                    | 4.80  | 5.80  |
| J                    | 25.40 | —     |
| K                    | —     | 19.30 |
| L                    | 16.80 | 17.80 |
| M                    | 6.60  | 7.10  |
| N                    | 4.70  | 5.20  |
| P                    | 1.20  | 1.30  |
| All Dimensions in mm |       |       |

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

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

| Characteristic                                                                                                     | Symbol                            | PBU 801     | PBU 802 | PBU 803 | PBU 804 | PBU 805 | PBU 806 | PBU 807 | Unit             |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|---------|---------|---------|---------|---------|---------|------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                             | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$   | 50          | 100     | 200     | 400     | 600     | 800     | 1000    | V                |
| RMS Reverse Voltage                                                                                                | $V_{R(RMS)}$                      | 35          | 70      | 140     | 280     | 420     | 560     | 700     | V                |
| Average Rectified Output Current @ T <sub>C</sub> = 100°C                                                          | I <sub>O</sub>                    | 8.0         |         |         |         |         |         |         | A                |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>                  | 300         |         |         |         |         |         |         | A                |
| Forward Voltage (per element) @ I <sub>F</sub> = 2.0A                                                              | V <sub>FM</sub>                   | 1.0         |         |         |         |         |         |         | V                |
| Peak Reverse Current @ T <sub>C</sub> = 25°C<br>at Rated DC Blocking Voltage @ T <sub>C</sub> = 125°C              | I <sub>R</sub>                    | 10<br>1.0   |         |         |         |         |         |         | μA<br>mA         |
| I <sup>2</sup> t Rating for Fusing (Note 2)                                                                        | I <sup>2</sup> t                  | 373         |         |         |         |         |         |         | A <sup>2</sup> s |
| Typical Thermal Resistance Junction to Case (Note 1)                                                               | R <sub>θJC</sub>                  | 7.5         |         |         |         |         |         |         | °C/W             |
| Operating and Storage Temperature Range                                                                            | T <sub>j</sub> , T <sub>STG</sub> | -65 to +150 |         |         |         |         |         |         | °C               |

Notes: 1. Thermal resistance junction to case mounted on heatsink.  
 2. Non-repetitive, for t > 1.0ms and t < 8.3ms.

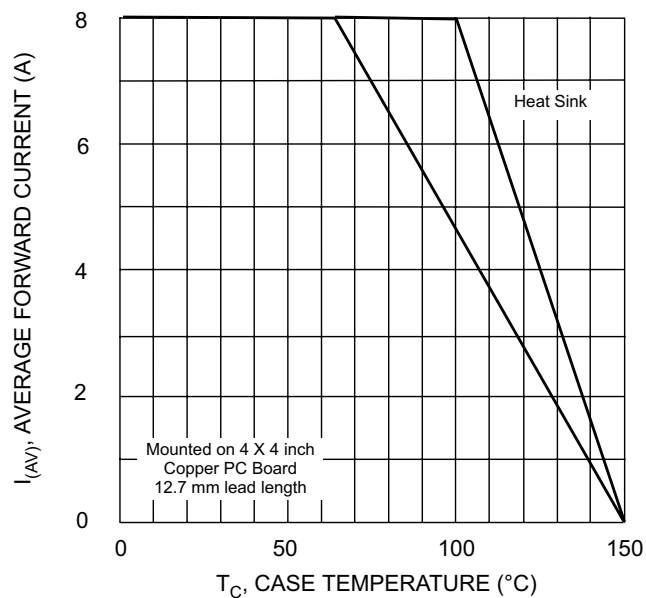


Fig. 1 Forward Current Derating Curve

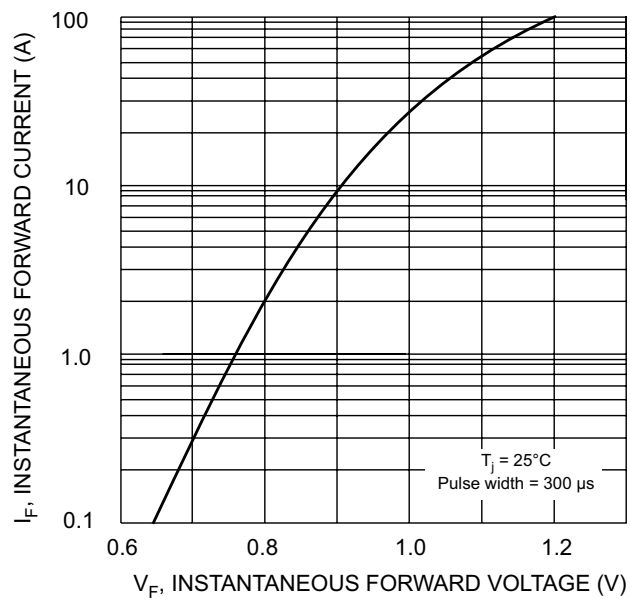


Fig. 2 Typical Forward Characteristics

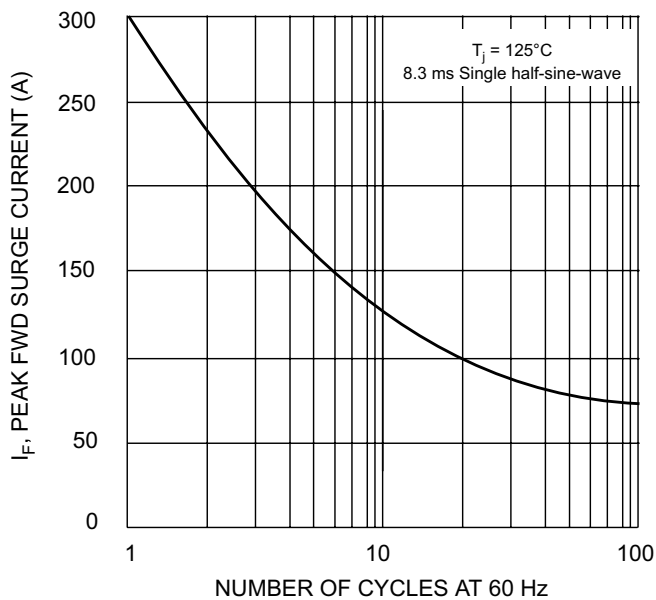


Fig. 3 Max Non-Repetitive Forward Surge Current

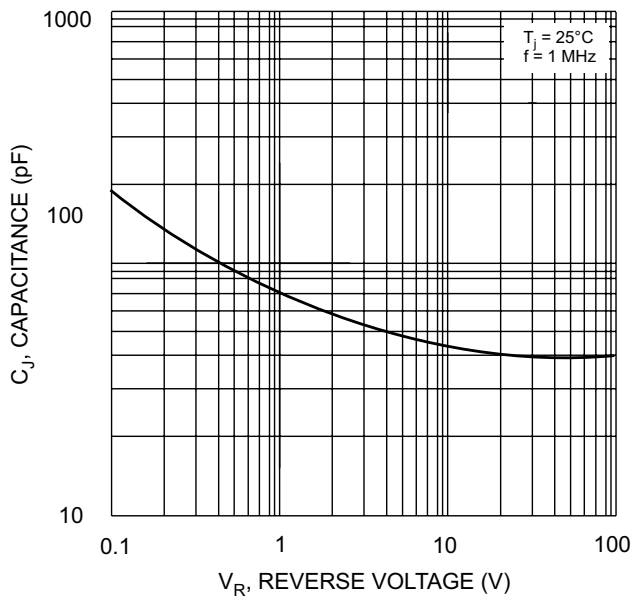


Fig. 4 Typ Junction Capacitance per element

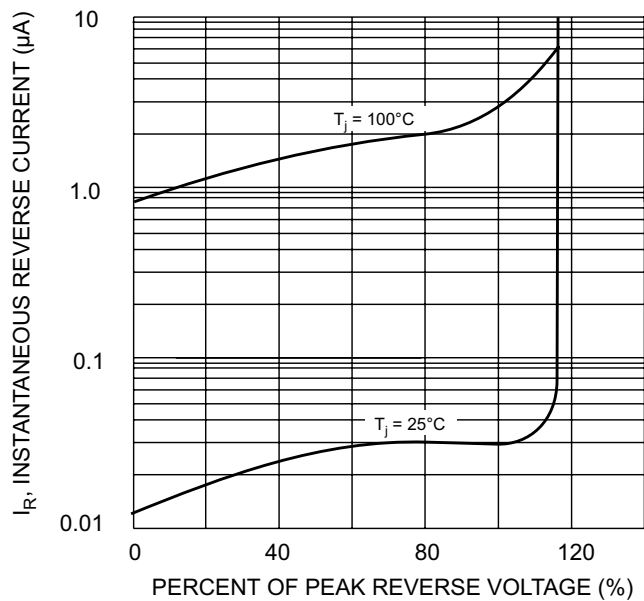


Fig. 5 Typical Reverse Characteristics