



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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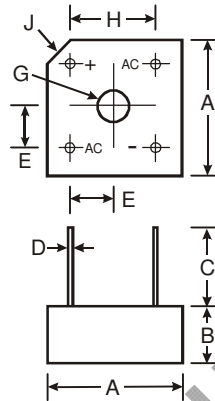


### Features

- High Current Capability
- Surge Overload Rating to 125A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- UL Listed Under Recognized Component Index, File Number E94661

### Mechanical Data

- Case: PBPC-8
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Ordering Information: See Page 2
- Marking: Type Number
- Weight: 5.4 grams (approximate)



| PBPC-8                      |                    |        |
|-----------------------------|--------------------|--------|
| Dim                         | Min                | Max    |
| A                           | 18.54              | 19.56  |
| B                           | 6.35               | 7.60   |
| C                           | 22.20              | —      |
| D                           | 1.27 ∅ Typical     |        |
| E                           | 5.33               | 7.37   |
| G                           | 3.60 ∅             | 4.00 ∅ |
| H                           | 12.70 Typical      |        |
| J                           | 2.38 X 45° Typical |        |
| <b>All Dimensions in mm</b> |                    |        |

### Maximum Ratings and Electrical Characteristics

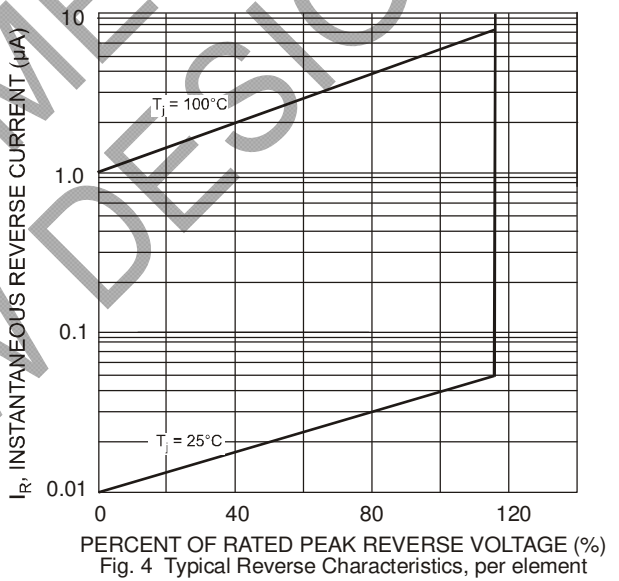
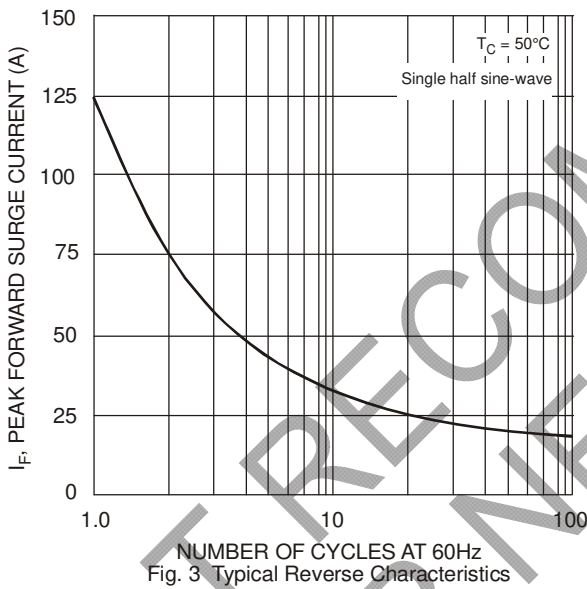
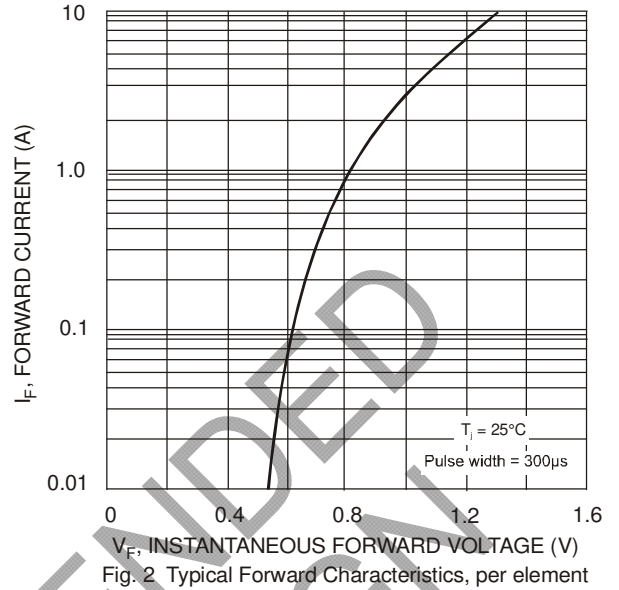
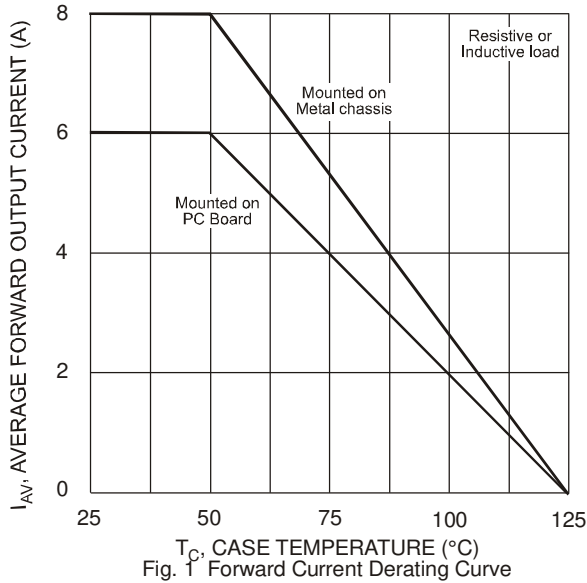
@T<sub>A</sub> = 25°C unless otherwise specified

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

| Characteristic   | Symbol                            | PBPC 801 | PBPC 802 | PBPC 803 | PBPC 804 | PBPC 805    | PBPC 806 | PBPC 807 | Unit |                  |
|--|-----------------------------------|----------|----------|----------|----------|-------------|----------|----------|------|------------------|
| Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>                  |          |          |          |          |             |          |          |      |                  |
| Working Peak Reverse Voltage   | V <sub>RWM</sub>                  | 50       | 100      | 200      | 400      | 600         | 800      | 1000     | V    |                  |
| DC Blocking Voltage  | V <sub>R</sub>                    |          |          |          |          |             |          |          |      |                  |
| RMS Reverse Voltage  | V <sub>R(RMS)</sub>               | 35       | 70       | 140      | 280      | 420         | 560      | 700      | V    |                  |
| Average Rectified Output Current (Note 1) @ T <sub>C</sub> = 50°C                                | I <sub>O</sub>                    |          |          |          |          | 8.0         |          |          |      | A                |
| (Note 2) @ T <sub>C</sub> = 50°C   |                                   |          |          |          |          | 6.0         |          |          |      |                  |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load | I <sub>FSM</sub>                  |          |          |          |          | 125         |          |          |      | A                |
| Forward Voltage (per element) @ I <sub>F</sub> = 4.0A  | V <sub>FM</sub>                   |          |          |          |          | 1.1         |          |          |      | V                |
| Peak Reverse Current @ T <sub>C</sub> = 25°C   | I <sub>R</sub>                    |          |          |          |          | 10          |          |          |      | μA               |
| at Rated DC Blocking Voltage (per element) @ T <sub>C</sub> = 100°C                              |                                   |          |          |          |          | 1.0         |          |          |      | mA               |
| I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 3)  | I <sup>2</sup> t                  |          |          |          |          | 64          |          |          |      | A <sup>2</sup> s |
| Typical Total Capacitance (Note 4)   | C <sub>T</sub>                    |          |          |          |          | 100         |          |          |      | pF               |
| Typical Thermal Resistance Junction to Case (per element)  | R <sub>θJC</sub>                  |          |          |          |          | 9.4         |          |          |      | °C/W             |
| Operating and Storage Temperature Range  | T <sub>j</sub> , T <sub>STG</sub> |          |          |          |          | -65 to +125 |          |          |      | °C               |

- Notes:
1. Mounted on metal chassis.
  2. Mounted on PC board FR-4 material.
  3. Non-repetitive, for t > 1.0ms and < 8.3ms.
  4. Per element, measured at 1.0 MHz and applied reverse voltage of 4.0V DC.





**Ordering Information** (Note 5)

| Device  | Packaging | Shipping |
|---------|-----------|----------|
| PBPC801 | PBPC-8    | 150/Box  |
| PBPC802 | PBPC-8    | 150/Box  |
| PBPC803 | PBPC-8    | 150/Box  |
| PBPC804 | PBPC-8    | 150/Box  |
| PBPC805 | PBPC-8    | 150/Box  |
| PBPC806 | PBPC-8    | 150/Box  |
| PBPC807 | PBPC-8    | 150/Box  |

Notes: 5. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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