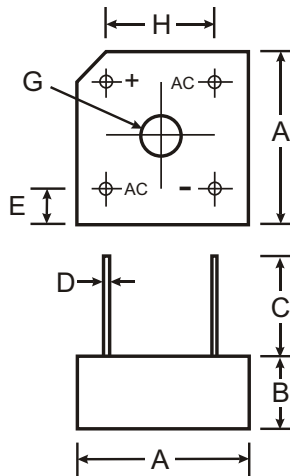


Features

- 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 Last Page
- Marking: Type Number
- Weight: 5.4 grams (approximate)



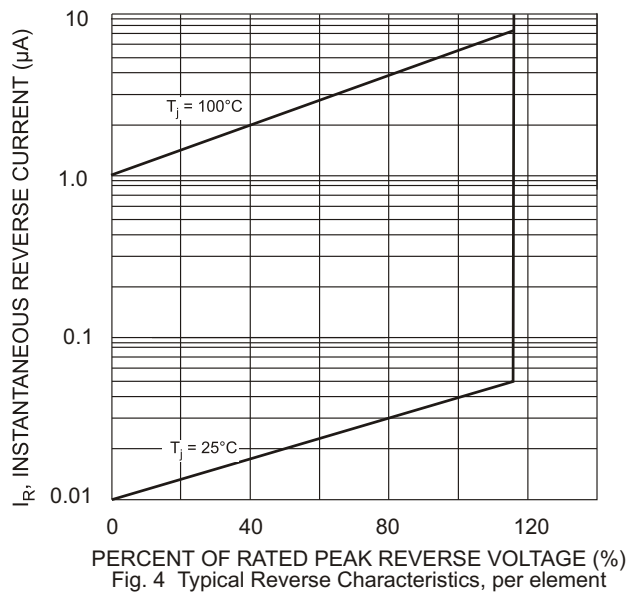
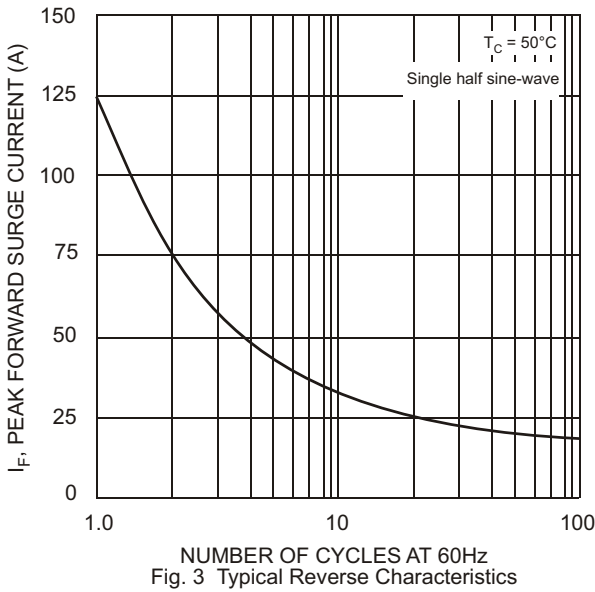
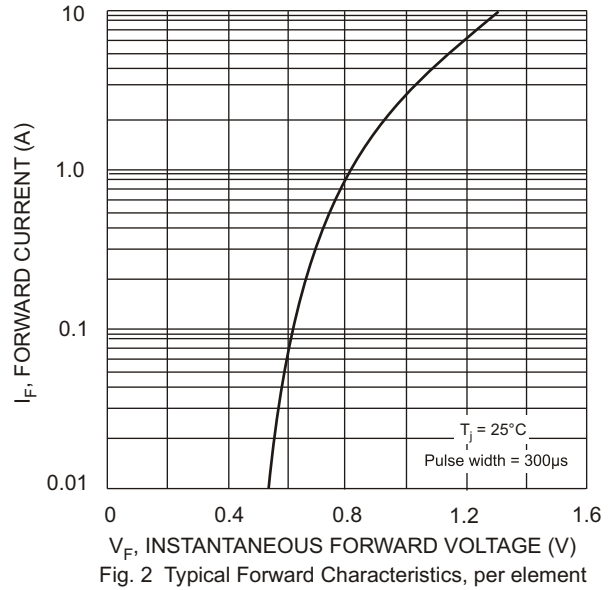
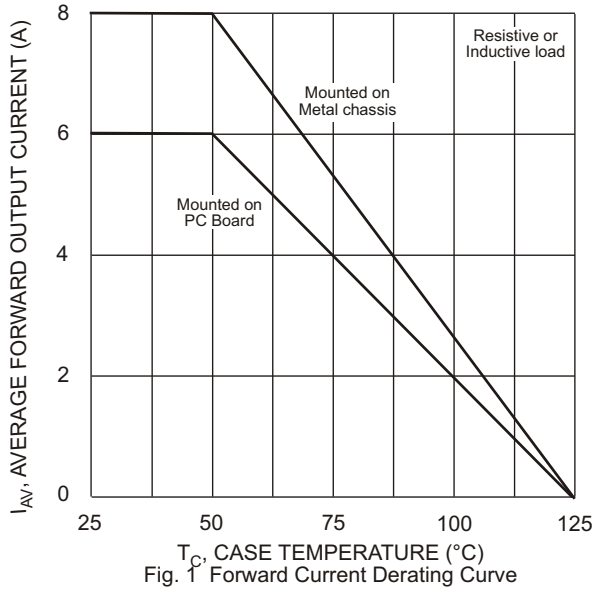
| PBPC-8 | | |
|----------------------|--------------------|---------|
| Dim | Min | Max |
| A | 18.54 | 19.56 |
| B | 6.35 | 7.60 |
| C | 22.20 | — |
| D | 1.27 | Typical |
| E | 5.33 | 7.37 |
| G | 3.60 | 4.00 |
| H | 12.70 Typical | |
| J | 2.38 X 45° Typical | |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, 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 _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Working Peak Reverse Voltage | V _{RWM} | | | | | | | | | |
| DC Blocking Voltage | V _R | | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Average Rectified Output Current (Note 1) @ T _C = 50°C (Note 2) @ T _C = 50°C | I _O | | | | | 8.0 6.0 | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | | | | | 125 | | | | A |
| Forward Voltage (per element) @ I _F = 4.0A | V _{FM} | | | | | 1.1 | | | | V |
| Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage (per element) @ T _C = 100°C | I _R | | | | | 10 1.0 | | | | μA mA |
| I ² t Rating for Fusing (t < 8.3ms) (Note 3) | I ² t | | | | | 64 | | | | A ² s |
| Typical Total Capacitance (Note 4) | C _T | | | | | 100 | | | | pF |
| Typical Thermal Resistance Junction to Case (per element) | R _{JC} | | | | | 9.4 | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | | | | | -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, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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