

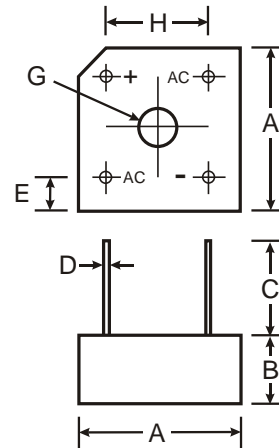
Features

- Ideal for Printed Circuit Board
- Surge Overload Rating of 125A Peak
- Low forward Voltage Drop
- The Plastic Material Carries U/L Recognition 94V-0
- **Lead Free Finish, RoHS Compliant (Date Code 0514+) (Note 1)**

**NOT RECOMMENDED FOR NEW DESIGNS -
USE PBPC601-PBPC607**

Mechanical Data

- Case: PB-6, Plastic
- Terminals: Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Body
- Weight: 4.56 grams



| PB-6 | | |
|----------------------|-------------|------------|
| Dim | Min | Max |
| A | 14.73 | 15.75 |
| B | 5.84 | 6.86 |
| C | 19 | — |
| D | 1.0 Typical | |
| E | 1.7 | 2.7 |
| G | 3.6 ϕ | 4.0 ϕ |
| H | 10.3 | 11.3 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics

Ratings at 25° C ambient temperature unless otherwise specified.
Single phase, 60Hz, resistive or inductive load.

| Characteristic | Symbol | PB605 | PB61 | PB62 | PB64 | PB66 | PB68 | PB610 | Unit |
|--|----------------|-------------|------|------|------|------|------|-------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Bridge Input Voltage | V_{RSM} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Output Current @ T_{HS} (Heatsink Temp) = 50°C | $I_{(AV)}$ | 6.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 125 | | | | | | | A |
| Maximum Forward Voltage Drop per element at 3.0A _{dc} | V_F | 1.1 | | | | | | | V |
| Maximum dc Reverse Current at rated dc Blocking Voltage per element @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$ | I_R | 10 1 | | | | | | | μA mA |
| Typical Thermal Resistance | R_{JC} | 8 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +150 | | | | | | | °C |

Notes: 1. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied where applicable, see *EU Directive Annex Notes 5 and 7.*

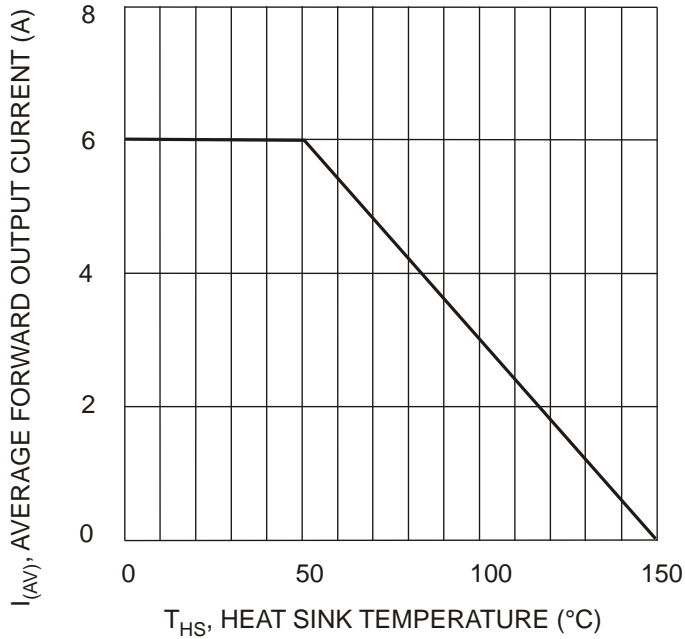


Fig. 1, Derating Curve for Output Rectified Current

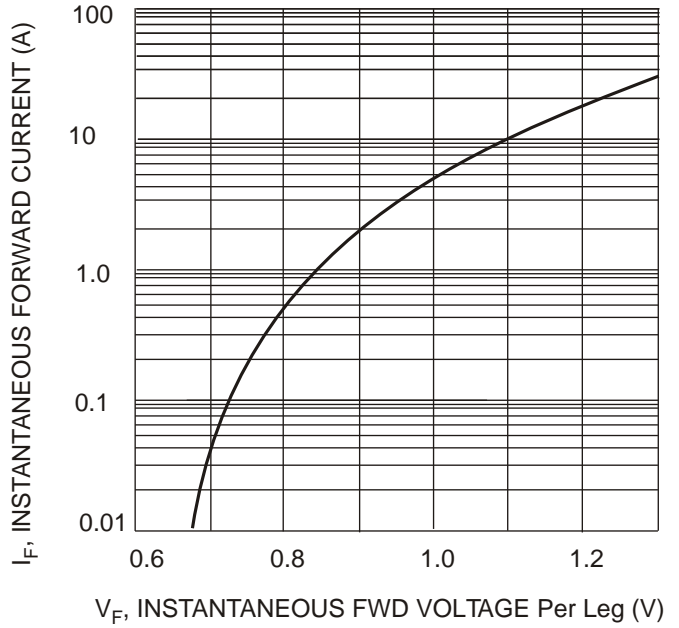


Fig. 2, Typical Forward Characteristics

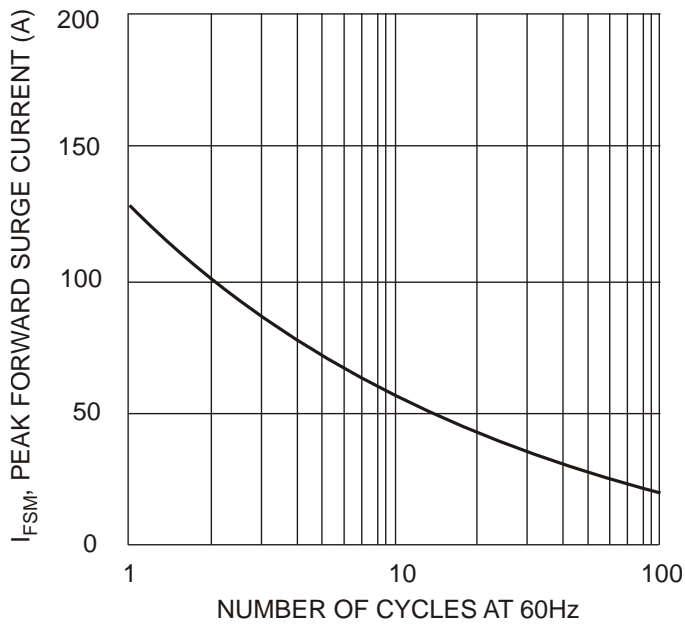


Fig. 3, Maximum Forward Surge Current

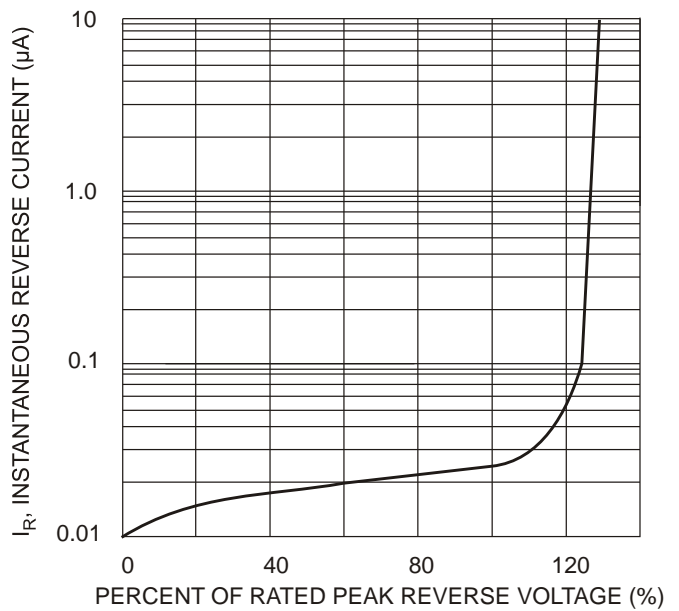


Fig. 4, Typical Reverse Characteristics

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USE PBPC601-PBPC607**

Ordering Information (Note 2)

| Device | Packaging | Shipping |
|--------|-----------|----------|
| PB605 | PB-6 | 200 Bulk |
| PB61 | PB-6 | 200 Bulk |
| PB62 | PB-6 | 200 Bulk |
| PB64 | PB-6 | 200 Bulk |
| PB66 | PB-6 | 200 Bulk |
| PB68 | PB-6 | 200 Bulk |
| PB610 | PB-6 | 200 Bulk |

Notes: 2. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

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