



**E502650**

## Features

- Low Forward Voltage and Any Mounting Position
- Surge Overload Rating of 250 Amps
- Silver Plated Copper Leads
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 21°C/W Junction to Ambient

## Mechanical Data

- Mounting Torque: 4.5in-lbs Maximum
- Mounting Hole: #6 Screw

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| PB805           | PB805          | 50V                                    | 35V                 | 50V                         |
| PB81            | PB81           | 100V                                   | 70V                 | 100V                        |
| PB82            | PB82           | 200V                                   | 140V                | 200V                        |
| PB84            | PB84           | 400V                                   | 280V                | 400V                        |
| PB86            | PB86           | 600V                                   | 420V                | 600V                        |
| PB88            | PB88           | 800V                                   | 560V                | 800V                        |
| PB810           | PB810          | 1000V                                  | 700V                | 1000V                       |

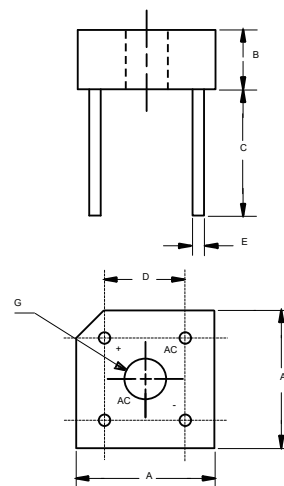
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |             |               |                                                       |
|---------------------------------------------------------|-------------|---------------|-------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 8.0A          | $T_c = 50^\circ\text{C}$                              |
| Peak Forward Surge Current                              | $I_{FSM}$   | 220A          | 8.3ms, Half Sine                                      |
| Maximum Forward Voltage Drop Per Element                | $V_F$       | 1.1V          | $I_F = 4.0\text{A}$<br>$T_J = 25^\circ\text{C}$       |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 10μA<br>0.5mA | $T_J = 25^\circ\text{C}$<br>$T_J = 100^\circ\text{C}$ |

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

# 8 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

## PB-10



| DIMENSIONS |                     |       |       |       |         |
|------------|---------------------|-------|-------|-------|---------|
| DIM        | INCHES              |       | MM    |       | NOTE    |
|            | MIN                 | MAX   | MIN   | MAX   |         |
| A          | 0.730               | 0.770 | 18.50 | 19.56 | 2PL     |
| B          | 0.250               | 0.300 | 6.35  | 7.60  |         |
| C          | 0.750               | ---   | 19.10 | ---   |         |
| D          | 0.480               | 0.520 | 12.20 | 13.20 | 2PL     |
| E          | 0.050               |       | 1.27  |       | 4PL/TYP |
| G          | HOLE FOR NO 6 SCREW |       |       |       | Φ       |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

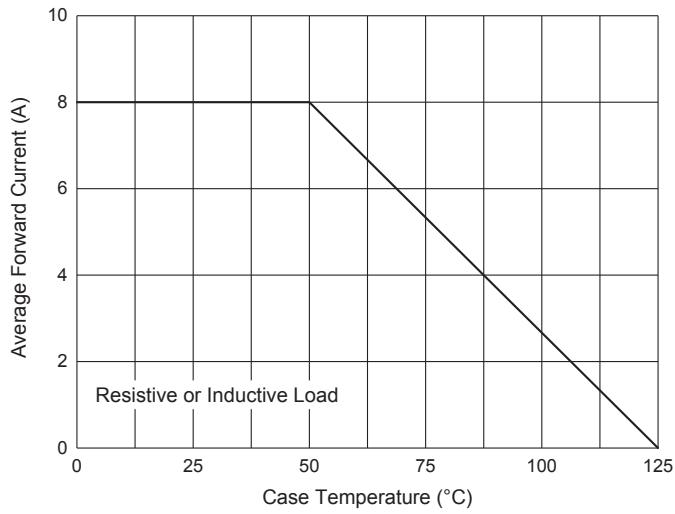


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

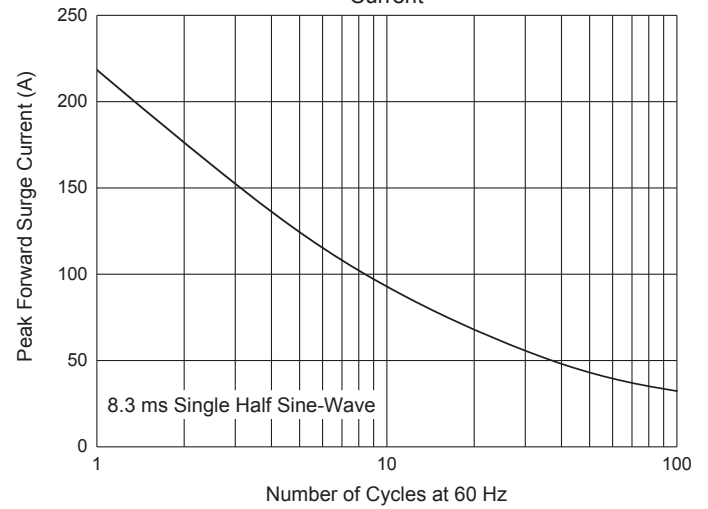


Fig. 3 - Typical Instantaneous Forward Characteristics

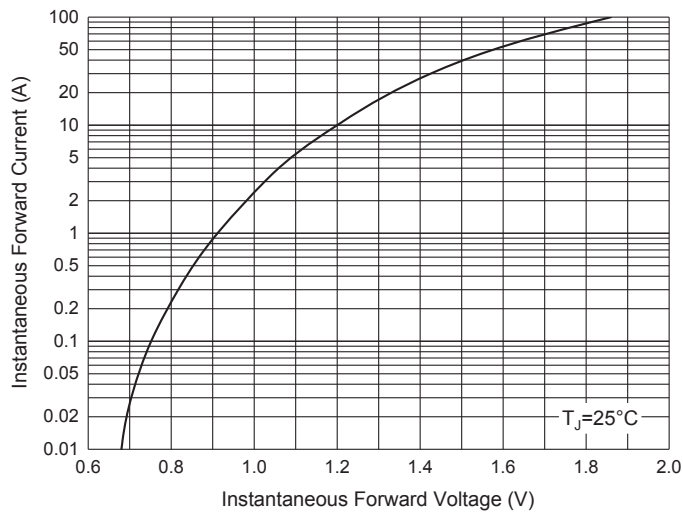
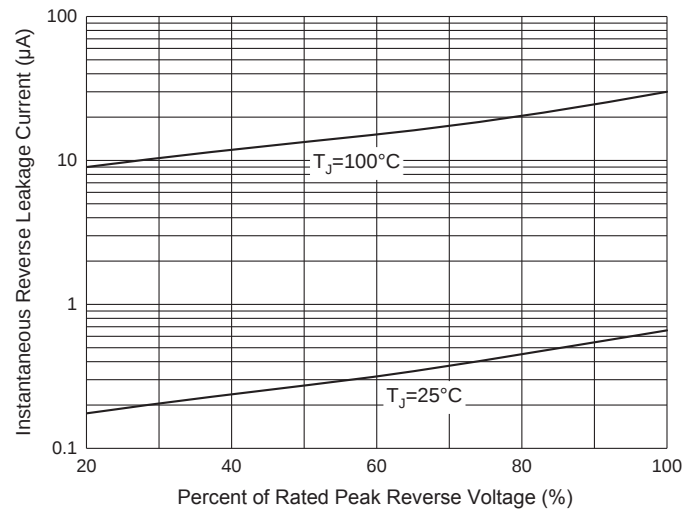


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                       |
|----------------|-------------------------------|
| Part Number-BP | Bulk; 200Pcs/Box, 2000Pcs/Ctn |

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