



# PBU801 - PBU807

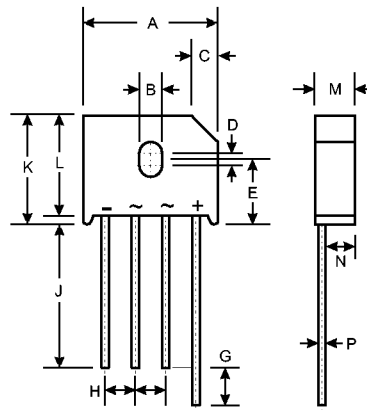
## 8.0A BRIDGE RECTIFIER

### Features

- Diffused Junction
- Low Forward Voltage Drop, High Current 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.)
- Mounting Position: Any
- Marking: Type Number



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	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
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 @ T <sub>C</sub> = 100°C	I <sub>O</sub>	8.0							A
Non-Repetitive Peak Forward Surge Current 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 at Rated DC Blocking Voltage @ T <sub>C</sub> = 125°C	I <sub>R</sub>	10 1.0							μA 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							K/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.

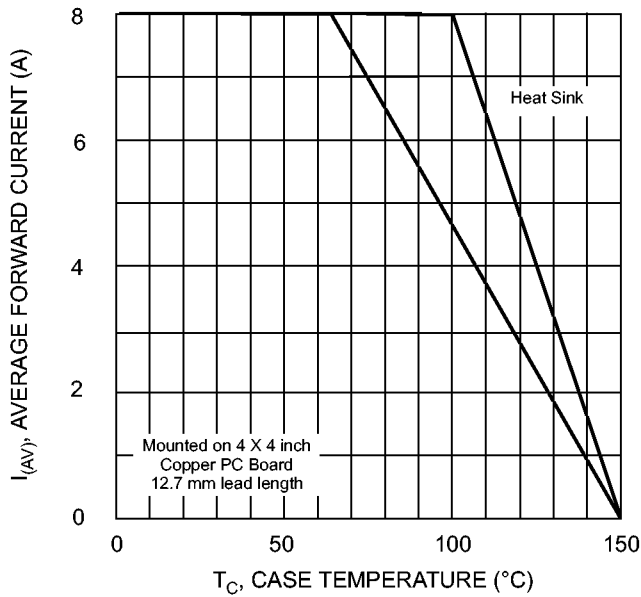


Fig. 1 Forward Current Derating Curve

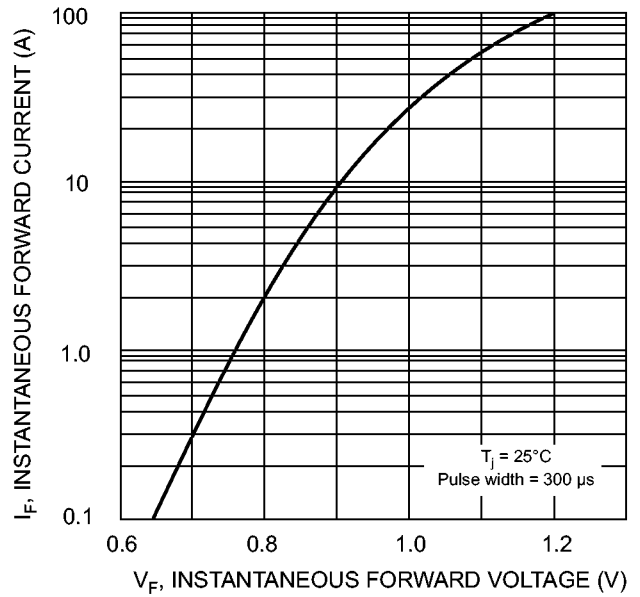


Fig. 2 Typical Forward Characteristics

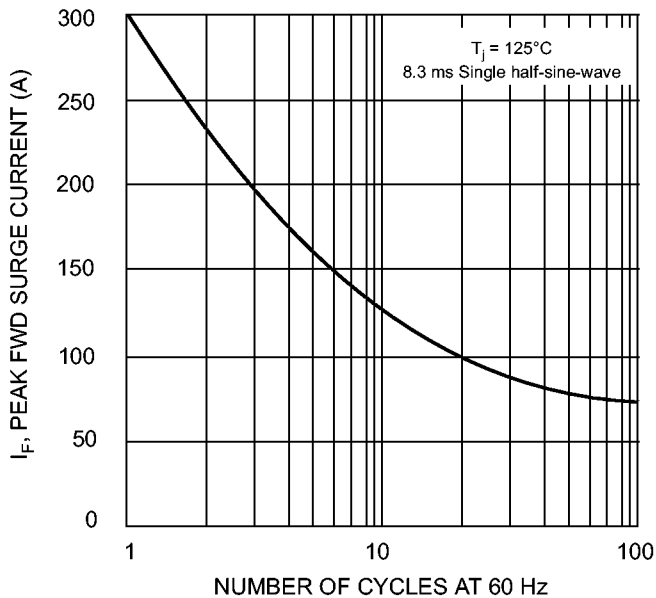


Fig. 3 Max Non-Repetitive Forward Surge Current

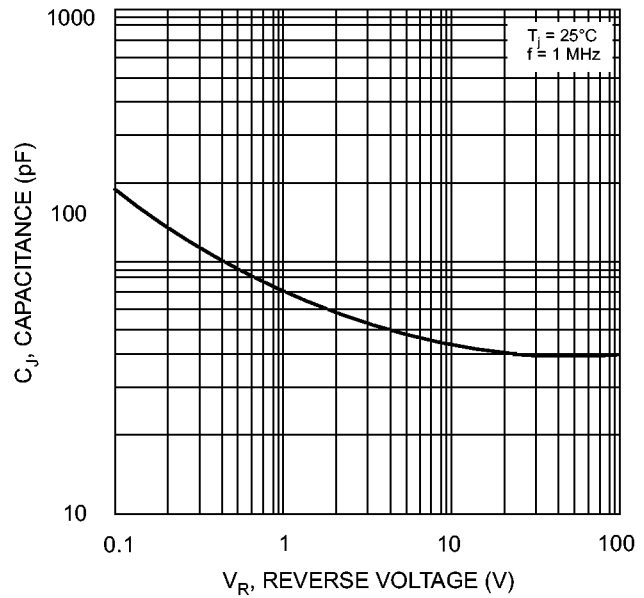


Fig. 4 Typ Junction Capacitance per element

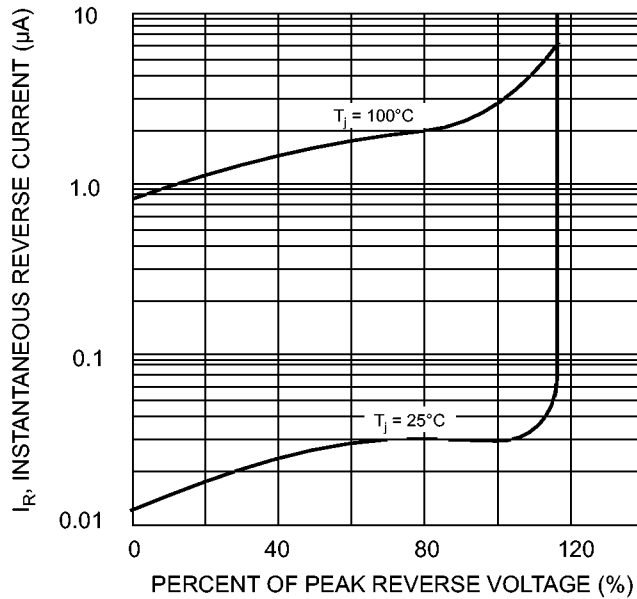


Fig. 5 Typical Reverse Characteristics