

# PBPC801 - PBPC807

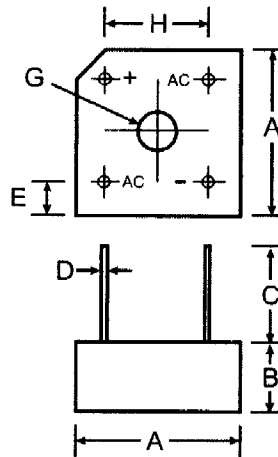
## 8.0A BRIDGE RECTIFIER

### Features

- Diffused Junction
- High Current Capability
- Surge Overload Rating to 125A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- Plastic Material - UL Flammability Classification 94V-0

### Mechanical Data

- Case: Molded Plastic
- 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
- Weight: 5.4 grams (approx)
- Mounting Position: Any
- Marking: Type Number



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

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ 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 Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{RDC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_C = 50^\circ\text{C}$ (Note 2) @ $T_C = 50^\circ\text{C}$	$I_O$					8.0 6.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$					125			A
Forward Voltage (per element) @ $I_F = 4.0\text{A}$	$V_{FM}$					1.1			V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage (per element) @ $T_C = 100^\circ\text{C}$	$I_R$					10 1.0			$\mu\text{A}$ mA
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 3)	$I^2t$					64			$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 4)	$C_j$					100			pF
Typical Thermal Resistance Junction to Case (per element)	$R_{\theta JC}$					9.4			K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$					-65 to +125			$^\circ\text{C}$

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

