

PBPC601 - PBPC607

6.0A BRIDGE RECTIFIER

Features

- 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 Rating 94V-0
- UL Listed: Recognized Component Index, File Number E94661

Mechanical Data

Case: Molded Plastic

Terminals: Plated Leads Solderable per

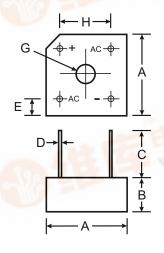
MIL-STD-202, Method 208

Polarity: Marked on Body

Mounting: Through Hole for #6 Screw

Mounting Torque: 5.0 Inch-pounds Maximum

Weight: 3.8 grams (approx)Marking: Type Number



PBPC-3								
Dim	Min	Max						
Α	14.73	15.75						
В	5.84	6.86						
С	19.00	L —						
D	0.76Ø Typical							
E	1.70	3.20						
G		for #6 ew						
	3.60∅	4.00Ø						
Н	10.30	11.30						
All Dimensions in mm								

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

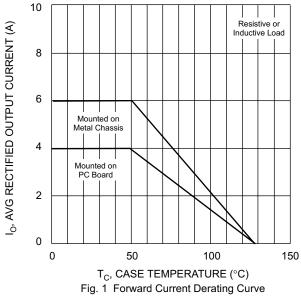
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

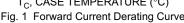
Characteristic	Symbol	PBPC 601	PBPC 602	PBPC 603	PBPC 604	PBPC 605	PBPC 606	PBPC 607	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _C = 50°C (Note 2) @ T _C = 50°C	Io	6.0 4.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		125						А	
Forward Voltage (per element) @ I _F = 3.0A		1.1 W W							V
Peak Reverse Current @T _C = 25°C at Rated DC Blocking Voltage (per element)@ T _C = 100°C		10 1.0						μA mA	
I ² t Rating for Fusing (t < 8.3ms) (Note 3)		64							A ² s
Typical Junction Capacitance (Note 4)		55							pF
Typical Thermal Resistance Junction to Case (per element)		12.5							°C/W
Operating and Storage Temperature Range		-65 to +125							°C

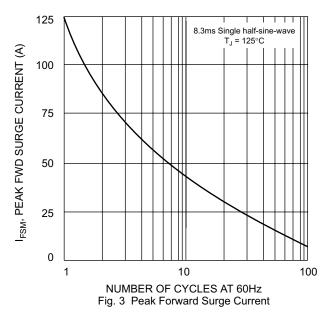
Notes:

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



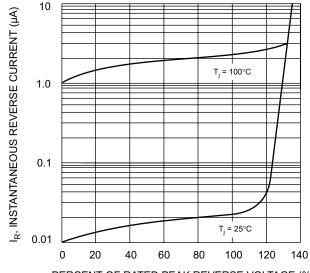






100 I_F, INSTANTANEOUS FORWARD CURRENT (A) Pulse width = 300μs $T_j = 25^{\circ}C$ 10 1.0 0.1 0.01 0.6 0.8 1.0 1.2 1.6 1.8 2.0 V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 2 Typical Forward Characteristics 10



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 4 Typical Reverse Characteristics