



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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PBPC601 - PBPC607

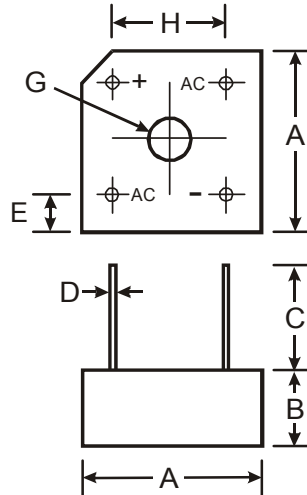
6.0A BRIDGE RECTIFIER

Features

- High Current Capability
- Surge Overload Rating to 125A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- UL Listed: Recognized Component Index, File Number E94661

Mechanical Data

- Case: PBPC-6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- 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
- Ordering Information: See Page 3
- Marking: Type Number
- Weight: 3.8 grams (approximate)



PBPC-6		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	1.01 \varnothing	Typical
E	1.70	3.20
G	Hole for #6 screw	
	3.60 \varnothing	4.00 \varnothing
H	10.30	11.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

(@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 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	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1) @ T _C = 50°C	I _o					6.0				A
(Note 2) @ T _C = 50°C						4.0				
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}					125				A
Forward Voltage (per element) @ I _F = 3.0A	V _{FM}					1.1				V
Peak Reverse Current @ T _C = 25°C	I _R					10				μ A
at Rated DC Blocking Voltage (per element) @ T _C = 100°C						1.0				
I ² t Rating for Fusing (t < 8.3ms) (Note 3)	I ² t					64				A ² s
Typical Total Capacitance (Note 4)	C _T					55				pF
Typical Thermal Resistance Junction to Case (per element)	R _{θJC}					12.5				°C/W
Operating and Storage Temperature Range	T _j , T _{STG}					-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. Per element, measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

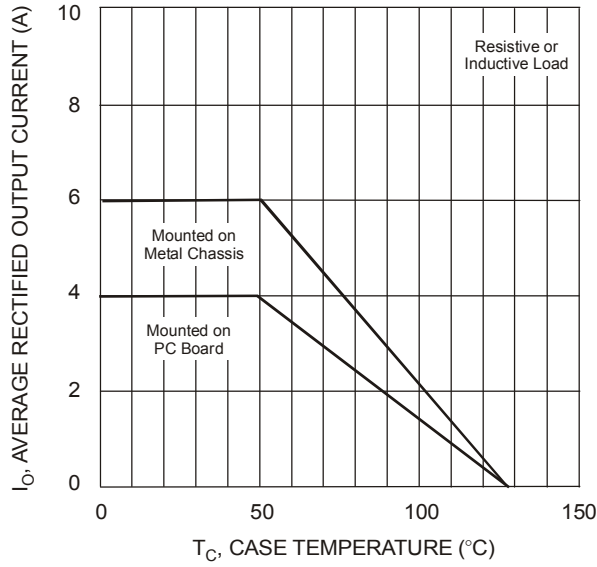


Fig. 1 Forward Current Derating Curve

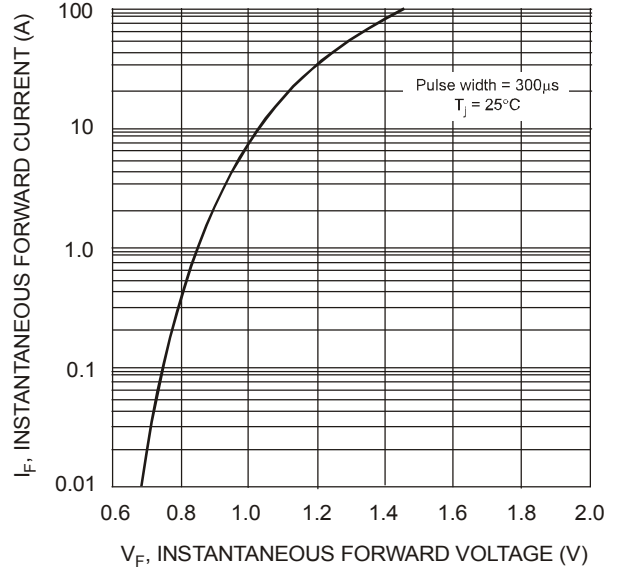


Fig. 2 Typical Forward Characteristics

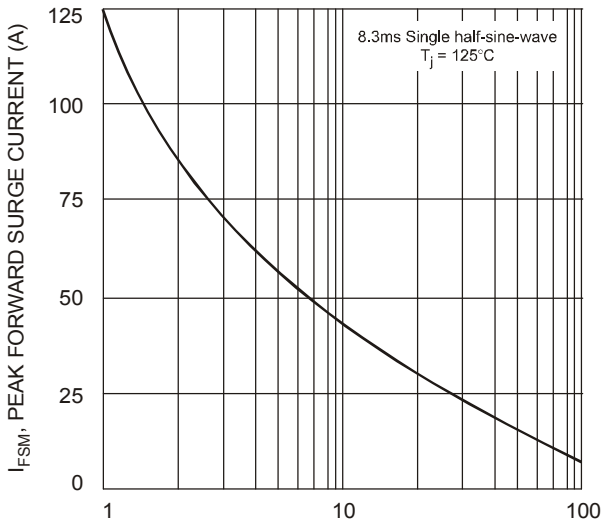


Fig. 3 Peak Forward Surge Current

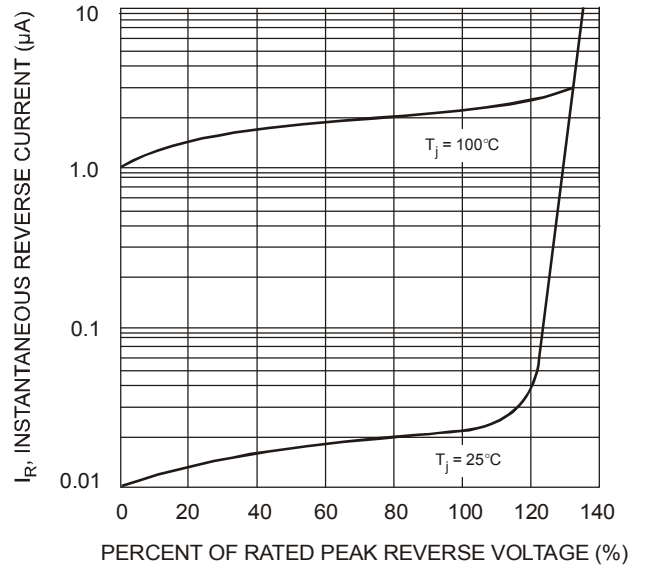


Fig. 4 Typical Reverse Characteristics

Ordering Information (Note 5)

Device	Packaging	Shipping
PBPC601	PBPC-6	200/Box
PBPC602	PBPC-6	200/Box
PBPC603	PBPC-6	200/Box
PBPC604	PBPC-6	200/Box
PBPC605	PBPC-6	200/Box
PBPC606	PBPC-6	200/Box
PBPC607	PBPC-6	200/Box

Note: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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