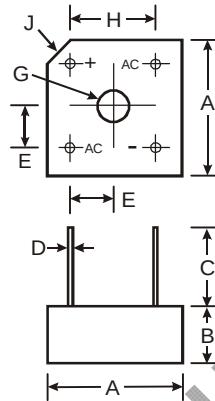


Features

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

Mechanical Data

- Case: PBPC-8
- 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 2
- Marking: Type Number
- Weight: 5.4 grams (approximate)



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, half wave, 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	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
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) @ $T_C = 50^\circ\text{C}$	I_O	8.0							A
(Note 2) @ $T_C = 50^\circ\text{C}$		6.0							
Non-Repetitive Peak Forward Surge Current 8.3ms	I_{FSM}	125							A
Single Half Sine-wave Superimposed on Rated Load									
Forward Voltage (per element) @ $I_F = 4.0\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$	I_R	10							μA
at Rated DC Blocking Voltage (per element) @ $T_C = 100^\circ\text{C}$		1.0							mA
I^2t Rating for Fusing ($t < 8.3\text{ms}$) (Note 3)	I^2t	64							A^2s
Typical Total Capacitance (Note 4)	C_T	100							pF
Typical Thermal Resistance Junction to Case (per element)	$R_{\theta JC}$	9.4							$^\circ\text{C/W}$
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. Per element, measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

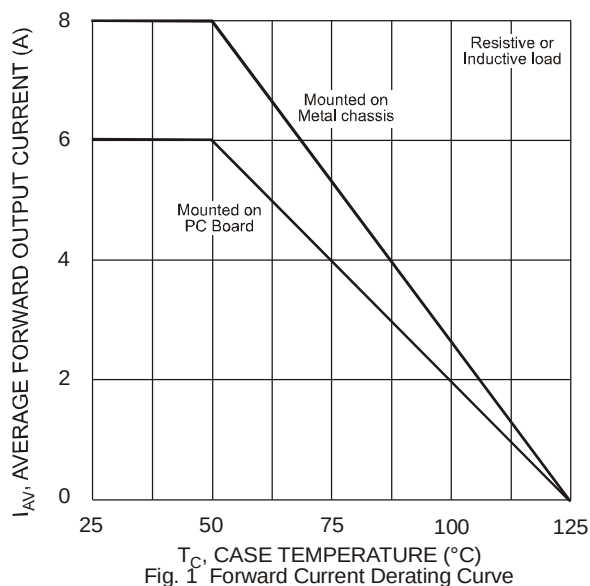


Fig. 1 Forward Current Derating Curve

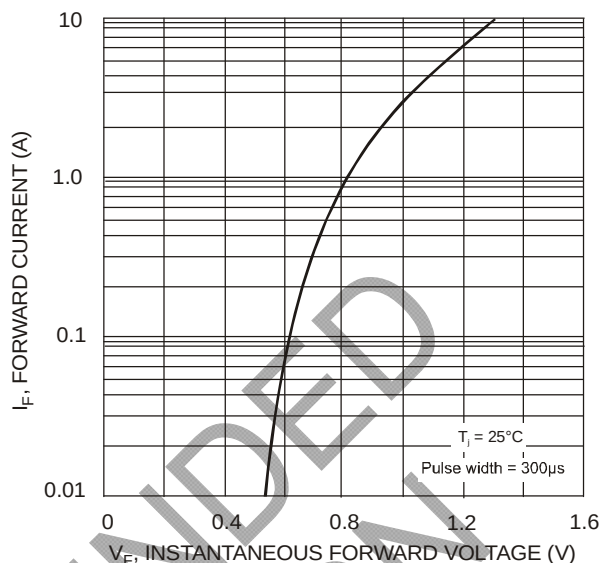


Fig. 2 Typical Forward Characteristics, per element

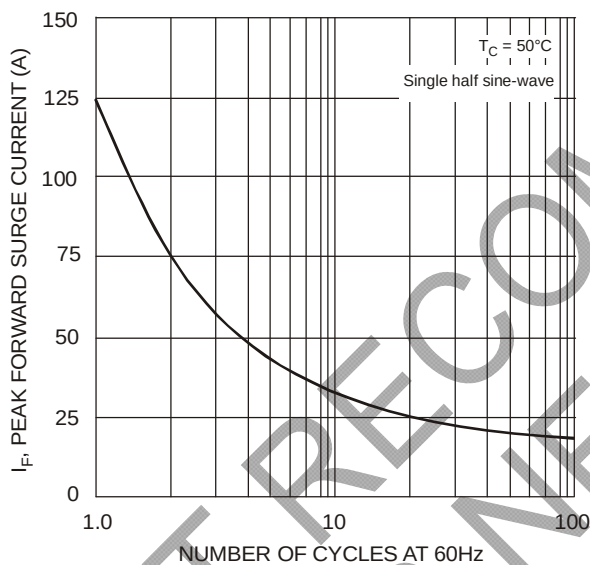


Fig. 3 Typical Reverse Characteristics

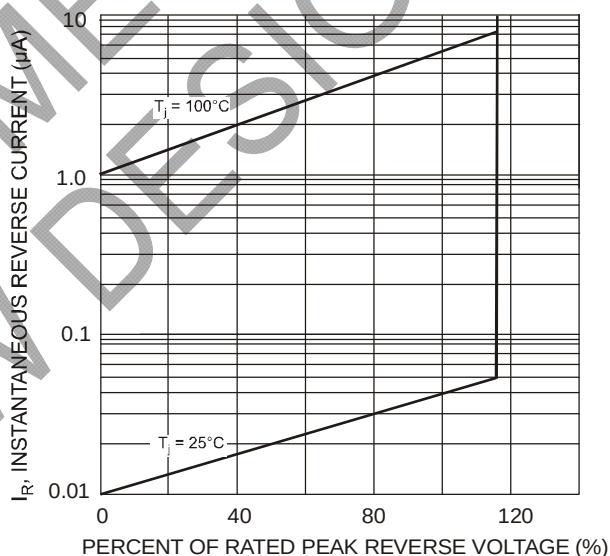


Fig. 4 Typical Reverse Characteristics, per element

Ordering Information (Note 5)

Device	Packaging	Shipping
PBPC801	PBPC-8	150/Box
PBPC802	PBPC-8	150/Box
PBPC803	PBPC-8	150/Box
PBPC804	PBPC-8	150/Box
PBPC805	PBPC-8	150/Box
PBPC806	PBPC-8	150/Box
PBPC807	PBPC-8	150/Box

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

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