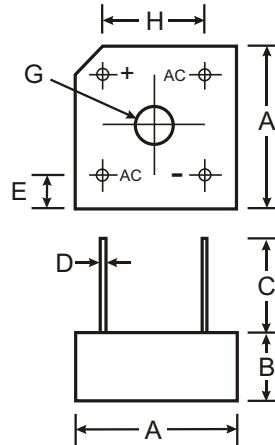


Features

- 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 Last Page
- 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	Typical
E	1.70	3.20
G	Hole for #6 screw	
	3.60	4.00
H	10.30	11.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 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	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1) @ T _C = 50 C (Note 2) @ T _C = 50 C	I_o					6.0 4.0				A
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 at Rated DC Blocking Voltage (per element) @ T _C = 100 C	I_R					10 1.0				A mA
I ² t Rating for Fusing (t < 8.3ms) (Note 3)	I^2t					64				A ² s
Typical Total Capacitance (Note 4)	C_T					55				pF
Typical Thermal Resistance Junction to Case (per element)	R_{JC}					12.5				C/W
Operating and Storage Temperature Range	T_j, T_{STG}					-65 to +125			C	

- Notes:
- Mounted on metal chassis.
 - Mounted on PC board FR-4 material.
 - Non-repetitive, for t > 1.0ms and < 8.3ms.
 - Per element, measured at f = 1.0MHz and applied reverse voltage of V_R = 4.0V DC.

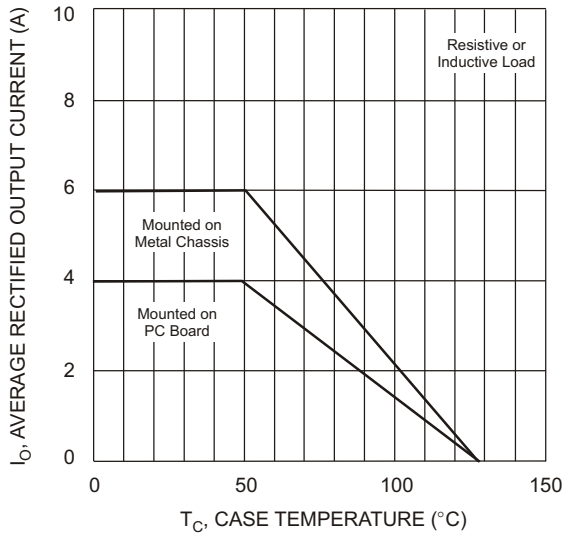


Fig. 1 Forward Current Derating Curve

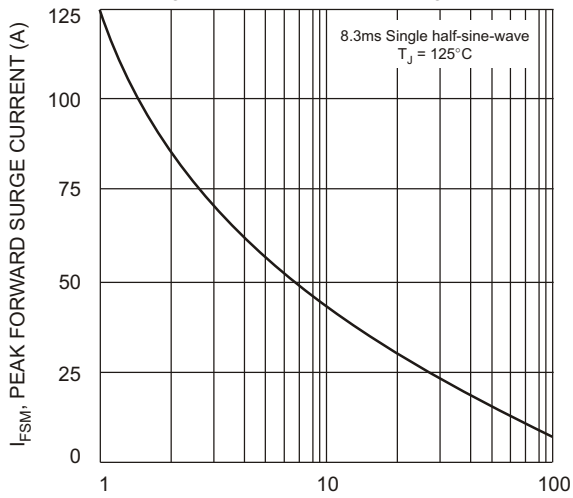


Fig. 3 Peak Forward Surge Current

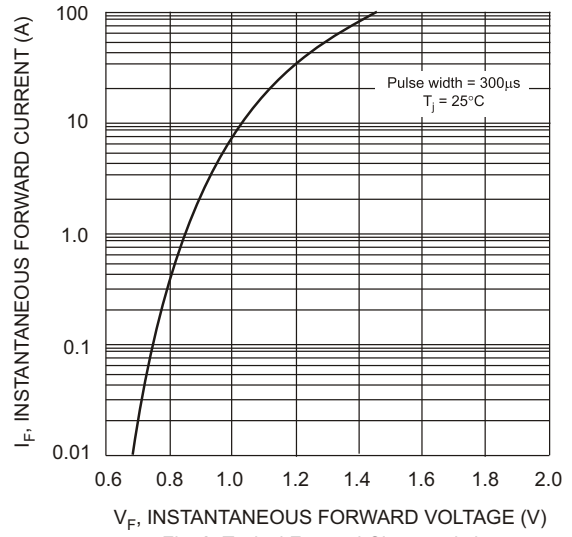


Fig. 2 Typical Forward Characteristics

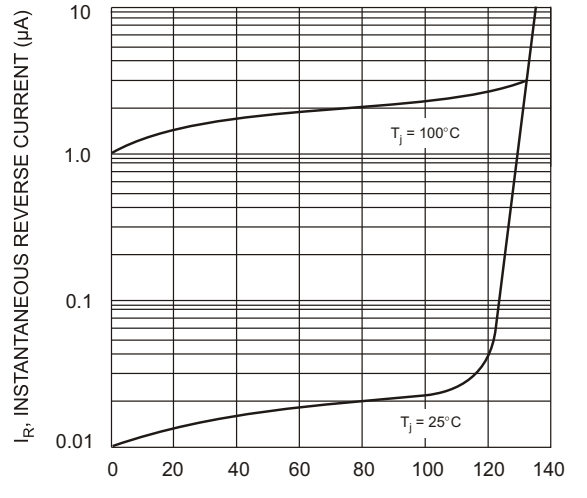


Fig. 4 Typical Reverse Characteristics

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

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

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