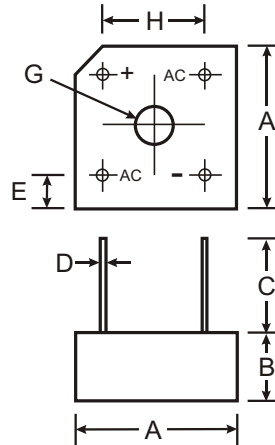


Features

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:
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 f = 1.0MHz and applied reverse voltage of V_R = 4.0V DC.

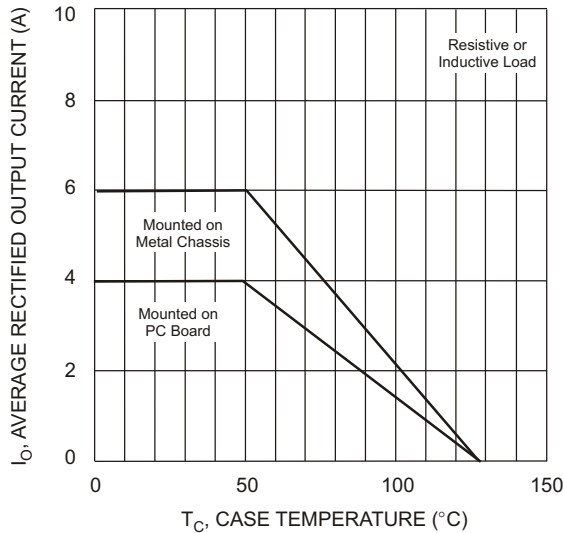


Fig. 1 Forward Current Derating Curve

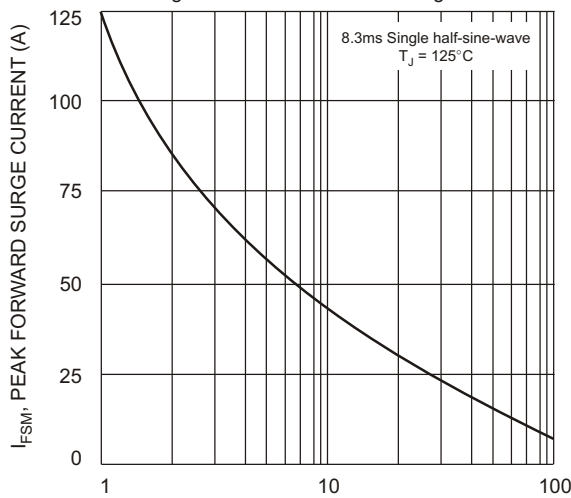


Fig. 3 Peak Forward Surge Current

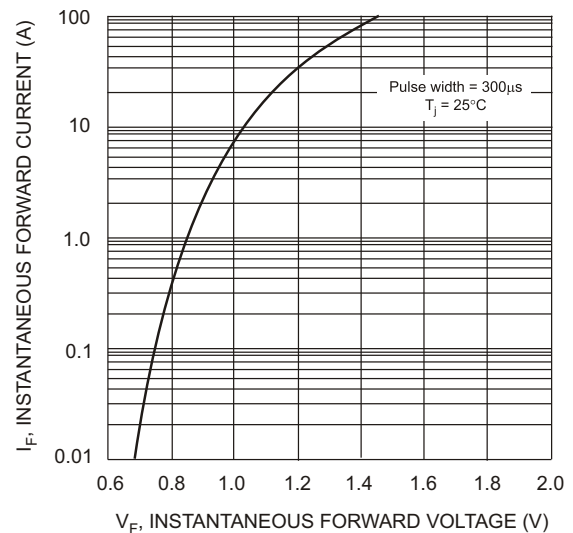


Fig. 2 Typical Forward Characteristics

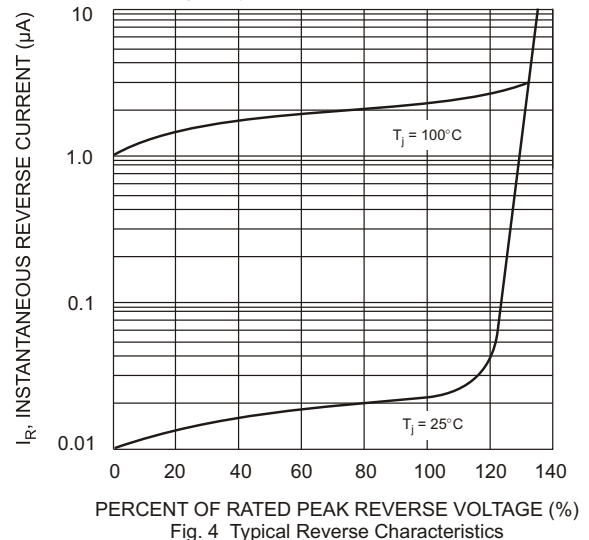


Fig. 4 Typical Reverse Characteristics

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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