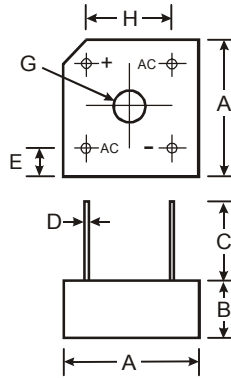


Features

- High Current Capability
- Surge Overload Rating to 50A 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-3
- Case Material: Molded Plastic. UL Flammability Classification 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 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Ordering Information: See Page 3
- Marking: Type Number
- Weight: 3.8 grams (approximate)



PBPC-3		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	0.76 \varnothing Typical	
E	1.70	3.20
G	Hole for screw	
	3.60	4.00
H	10.30	11.30
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 301	PBPC 302	PBPC 303	PBPC 304	PBPC 305	PBPC 306	PBPC 307	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) @ $T_C = 50^\circ\text{C}$ (Note 2) @ $T_C = 50^\circ\text{C}$	I_O					3.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}					50				A
Forward Voltage (per element) @ $I_F = 1.5\text{A}$	V_{FM}					1.2				V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage (per element) @ $T_C = 100^\circ\text{C}$	I_R					10				μA mA
I^2t Rating for Fusing ($t < 8.3\text{ms}$) (Note 3)	I^2t					10				A^2s
Typical Total Capacitance (Note 4)	C_T					55				pF
Typical Thermal Resistance Junction to Case (per element)	$R_{\theta JC}$					25				$^\circ\text{C/W}$
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.

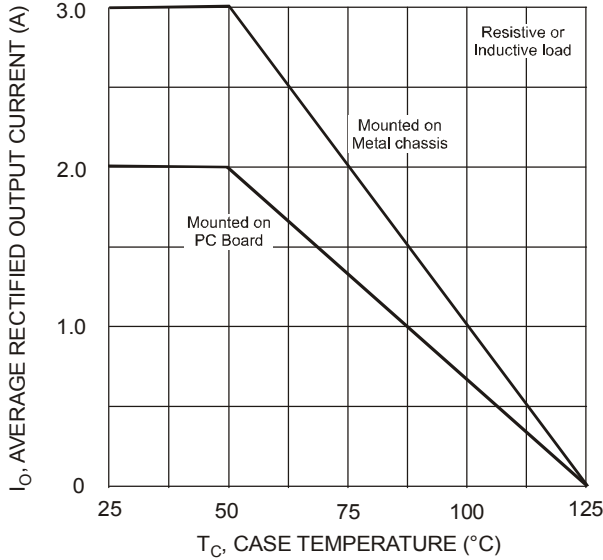


Fig. 1 Forward Current Derating Curve

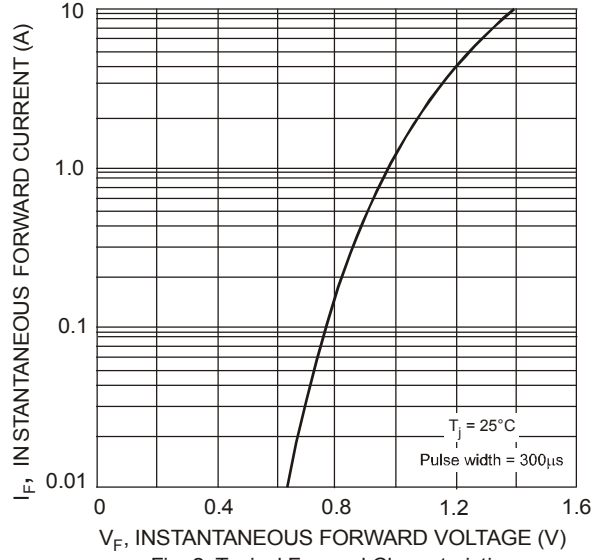


Fig. 2 Typical Forward Characteristics

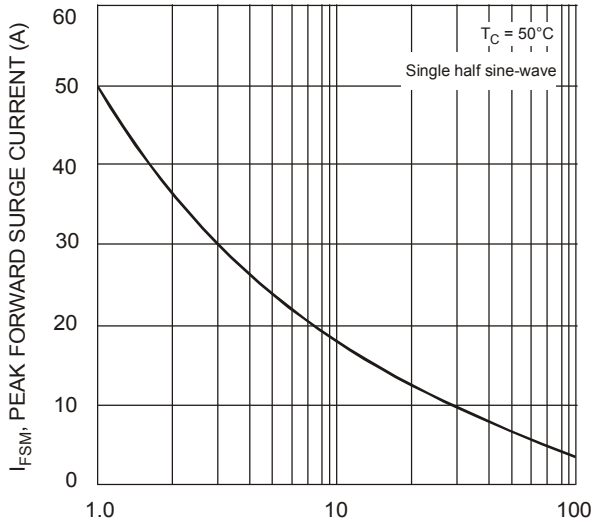


Fig. 3 Peak Forward Surge Current

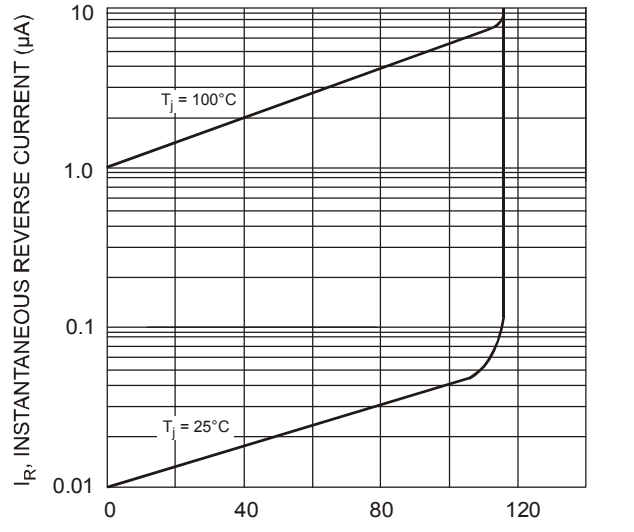


Fig. 4 Typical Reverse Characteristics

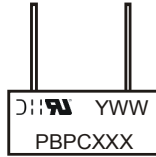
Ordering Information (Note 5 & 6)

Device*	Packaging	Shipping
PBPC30x	PBPC-3	200/Box

* x = Device type, e.g. PBPC301 or PBPC302, etc.

- Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.
 6. For lead free terminal plating part number, please add "-F" suffix to part number above. Example: PBPC304-F.

Marking Information



D:1 = Manufacturers' code marking
M Recognized Component Mark
XXX = Product type marking code, ex: PBPC307
YWW = Date code marking
Y = Last digit of year ex: 2 for 2002
WW = Week code 01 to 52

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