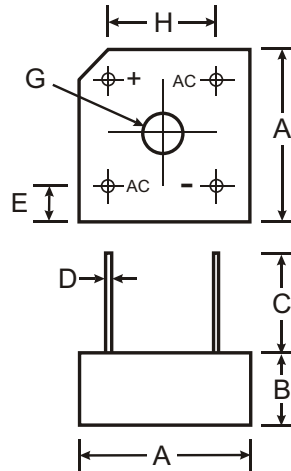


Features

- High Current Capability
- Surge Overload Rating to 50A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 5, on Page 3
- Polarity: Marked on Body
- Mounting: Through Hole for Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Weight: 3.8 grams (approx)
- Marking: Type Number



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, 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 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) @ $T_C = 50^\circ\text{C}$ (Note 2) @ $T_C = 50^\circ\text{C}$	I_o				3.0 2.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	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 1.0				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				$^\circ\text{C}/\text{W}$
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 $t > 1\text{ms}$ and $< 8.3\text{ms}$.
 4. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

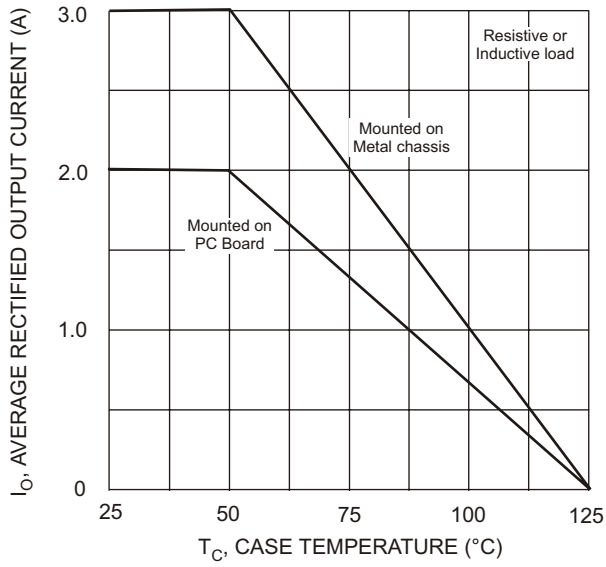


Fig. 1 Forward Current Derating Curve

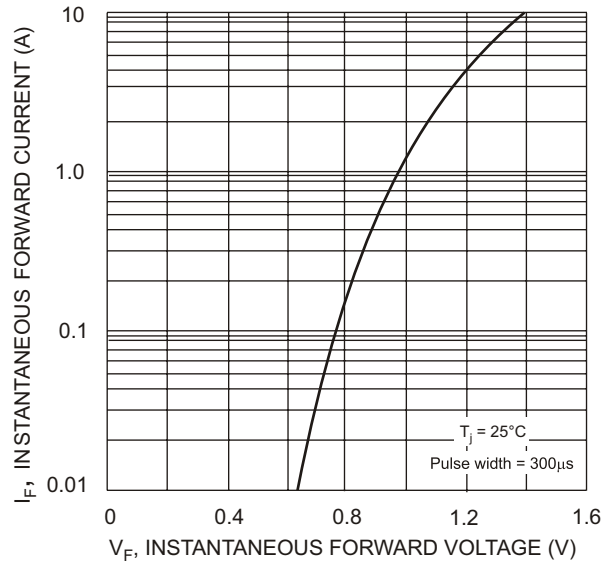


Fig. 2 Typical Forward Characteristics

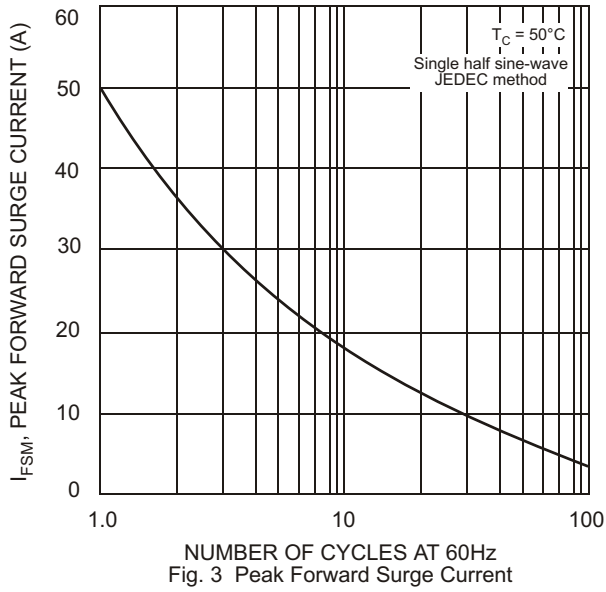


Fig. 3 Peak Forward Surge Current

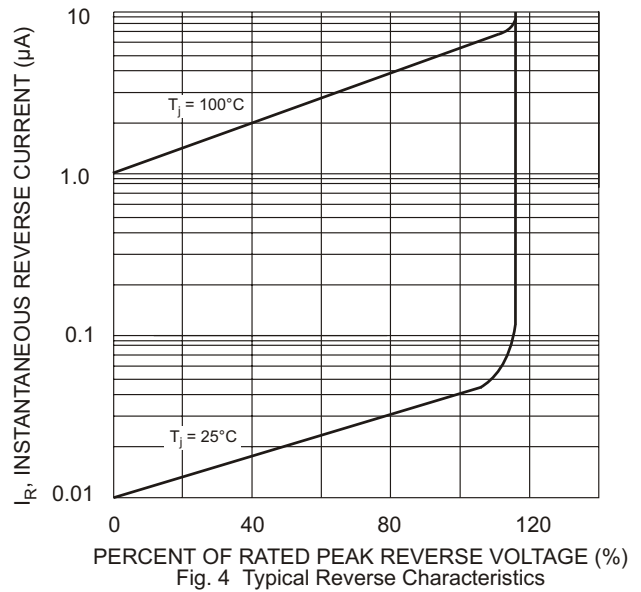


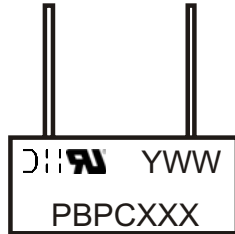
Fig. 4 Typical Reverse Characteristics

Ordering Information (Notes 4 & 5)

Device*	Packaging	Shipping
PBPC30x	PBPC-3	200 pieces per Tray

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

- Notes:
4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.
 5. For lead free terminal plating part number, please add "-F" suffix to part number above. Example: PBPC304-F.

Marking Information

DII = Manufacturers' code marking
UL UL 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