



PBPC301 - PBPC307

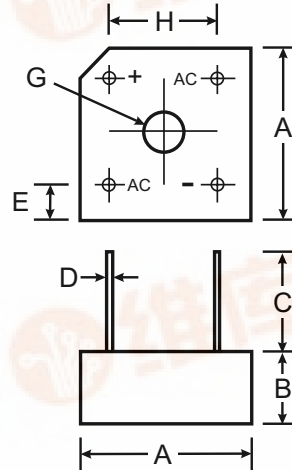
3.0A BRIDGE RECTIFIER

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
- Polarity: Marked on Body
- Mounting: Through Hole for #6 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 #6 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	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) @ $T_C = 50^\circ\text{C}$ (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 Junction Capacitance (Note 4)	C_j	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 $t > 1\text{ms}$ and $< 8.3\text{ms}$.
 4. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.



