

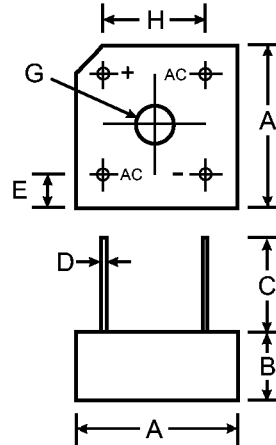


PBPC601 - PBPC607

6.0A BRIDGE RECTIFIER

Features

- Diffused Junction
- High Current Capability
- Surge Overload Rating to 125A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- Plastic Material: UL Flammability Classification Rating 94V-0
- UL Listed: Recognized Component Index, File Number E95060



PBPC-3		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	0.76Ø Typical	
E	1.70	2.70
G	Hole for #6 screw	
	3.60Ø	4.00Ø
H	10.30	11.30
All Dimensions in mm		

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)
- Mounting Position: Any
- Marking: Type Number

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 (JEDEC Method)	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				µA mA
I ² t Rating for Fusing (t < 8.3ms) (Note 3)	I^2t					64				A ² s
Typical Junction Capacitance (Note 4)	C_j					55				pF
Typical Thermal Resistance Junction to Case (per element)	$R_{θJC}$					12.5				K/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. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

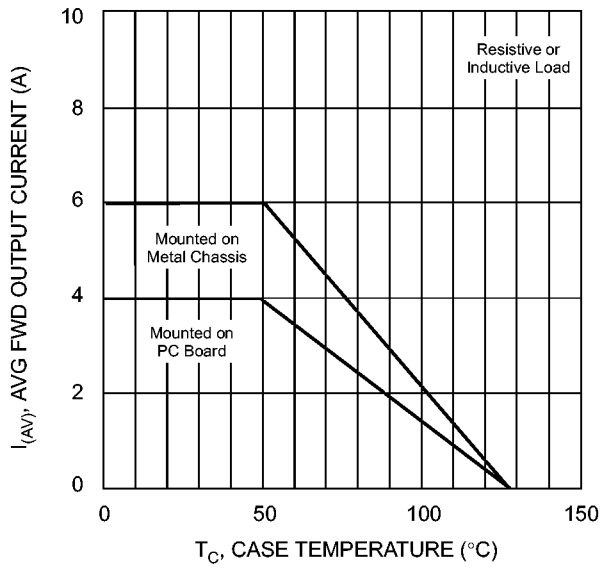


Fig. 1 Forward Current Derating Curve

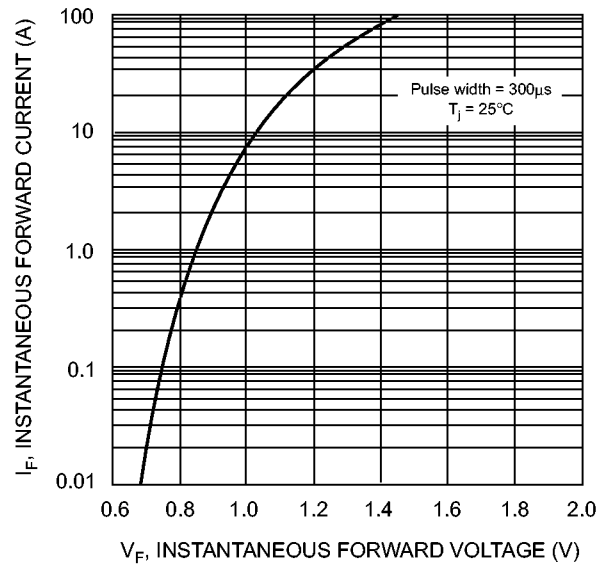


Fig. 2 Typical Forward Characteristics

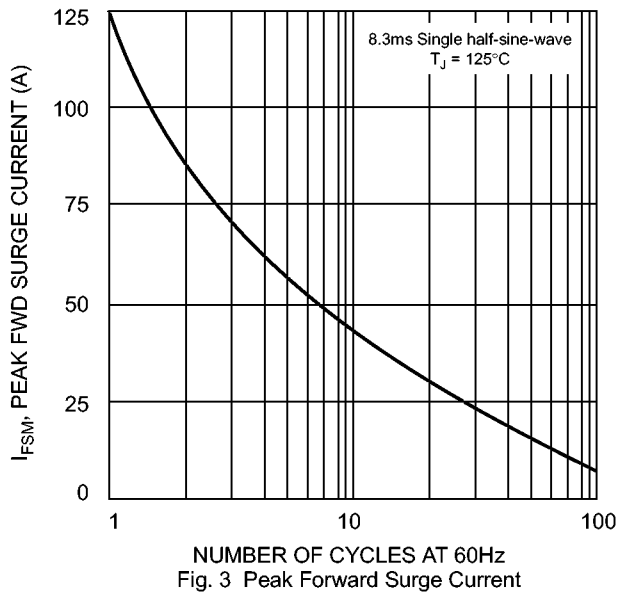


Fig. 3 Peak Forward Surge Current

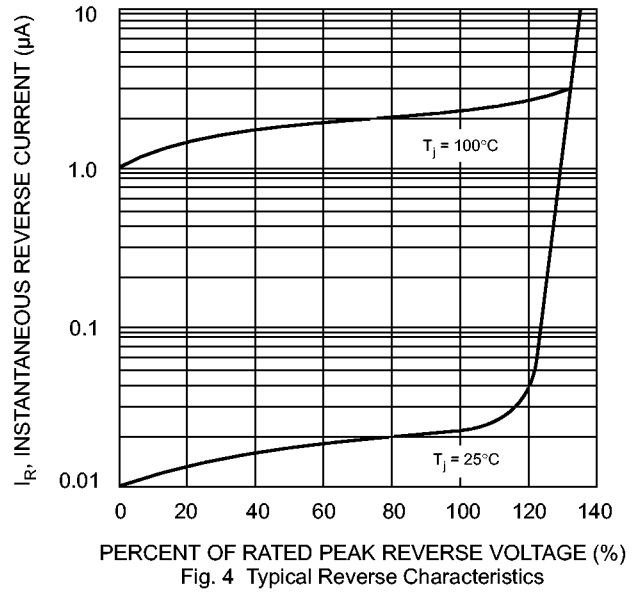


Fig. 4 Typical Reverse Characteristics