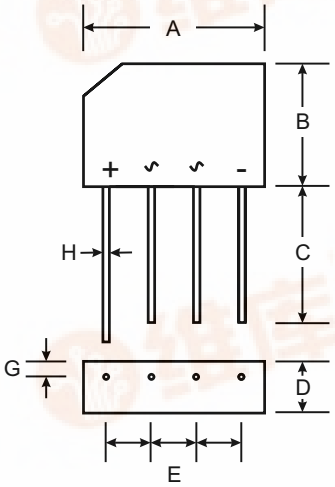
PBL401 - PBL407

4.0A BRIDGE RECTIFIER

Features

- High Case Dielectric Strength of 1500V
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 150A Peak
- Ideal for Printed Circuit Board Application
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E95060



PBL		
Dim	**Min**	**Max**
A	18.50	19.50
B	15.40	16.40
C	19.00	—
D	6.20	6.50
E	4.60	5.60
G	1.50	2.00
H	1.30 Typical	
All Dimensions in mm		

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Approx. Weight: 5.6 grams
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	PBL 401	PBL 402	PBL 403	PBL 404	PBL 405	PBL 406	PBL 407	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 @ T_C= 75°C	I_O	4.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							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 @ T_C = 100°C	I_R	10 1.0							μA mA
I^2t Rating for Fusing (t < 8.3ms) (Note 2)	I^2t	166							A^2s
Typical Thermal Resistance, Junction to Case (Note 1)	$R_{\theta JC}$	19							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125							°C

Notes: 1. Thermal resistance rom junction to case per element mounted on PC board with 13 x 13 x 0.03mm land areas.
2. Non-repetitive for t > 1ms and < 8.3ms.

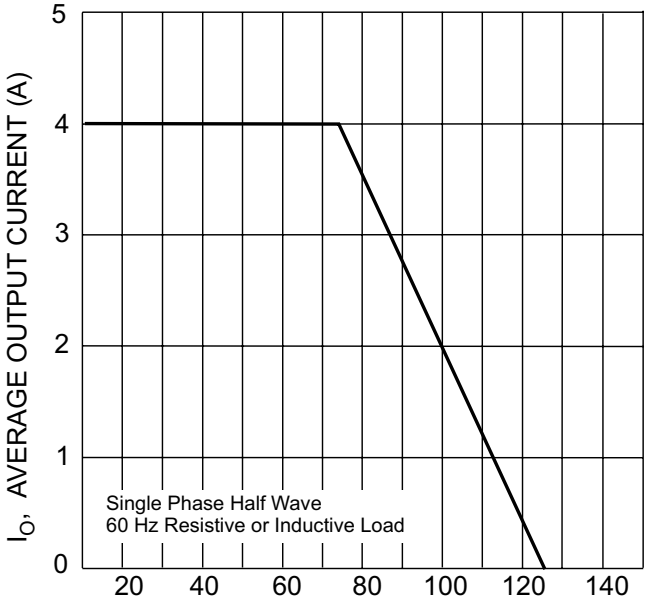


Fig. 1 Forward Current Derating Curve

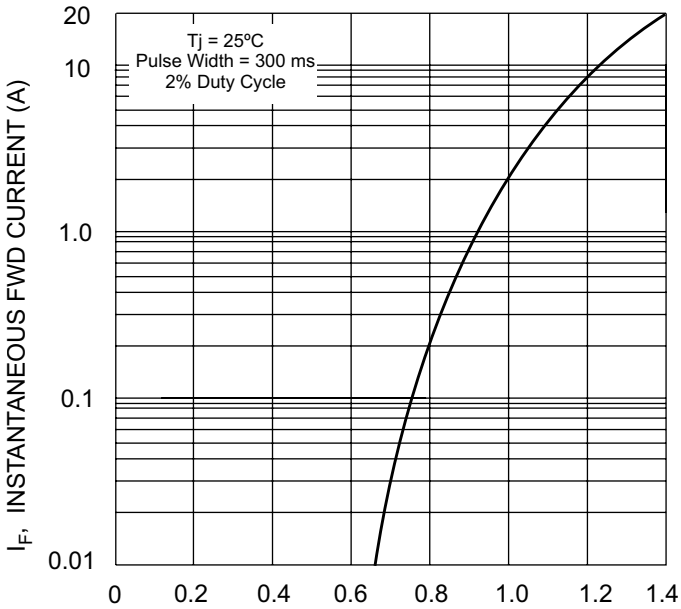


Fig. 2 Typical Forward Characteristics

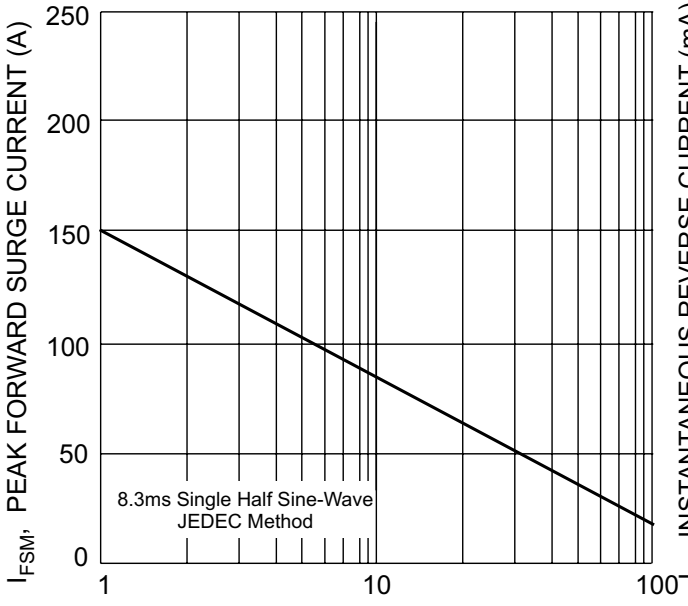


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

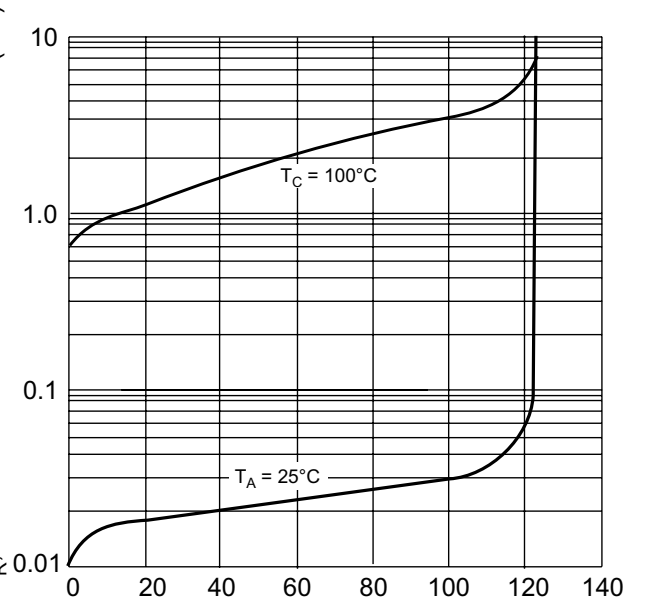


Fig. 4 Typical Reverse Characteristics, per element