

# PBL401 - PBL407

## 4.0A BRIDGE RECTIFIER

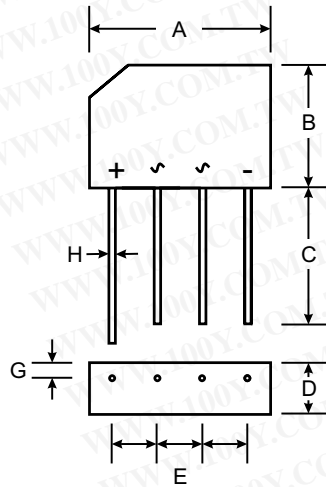
**NOT RECOMMENDED FOR NEW DESIGN**  
**USE GBU4005 - GBU410**

### 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

### 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



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		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 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 <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>C</sub> = 75°C	I <sub>O</sub>	4.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150							A
Forward Voltage per element @ I <sub>F</sub> = 3.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @ T <sub>C</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>C</sub> = 100°C	I <sub>R</sub>	10 1.0							μA mA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms) (Note 2)	I <sup>2</sup> t	166							A <sup>2</sup> s
Typical Thermal Resistance, Junction to Case (Note 1)	R <sub>θJC</sub>	19							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +125							°C

- Notes: 1. Thermal resistance from 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.

勝特力材料 886-3-5753170  
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 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

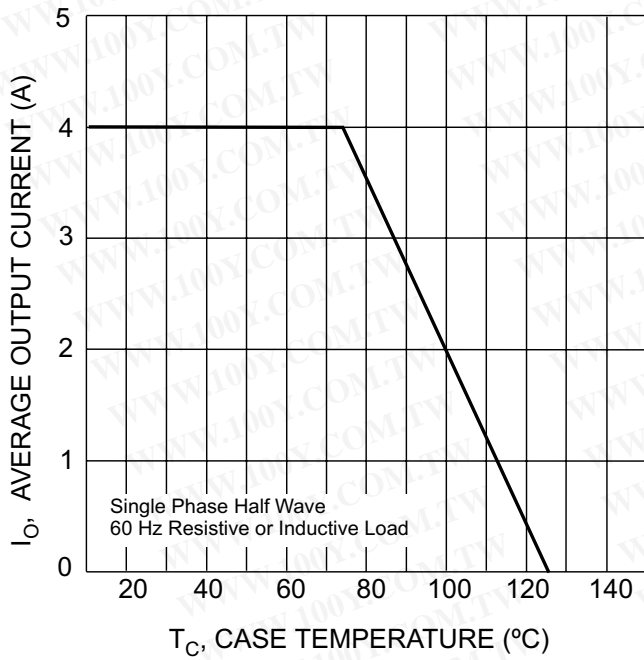


Fig. 1 Forward Current Derating Curve

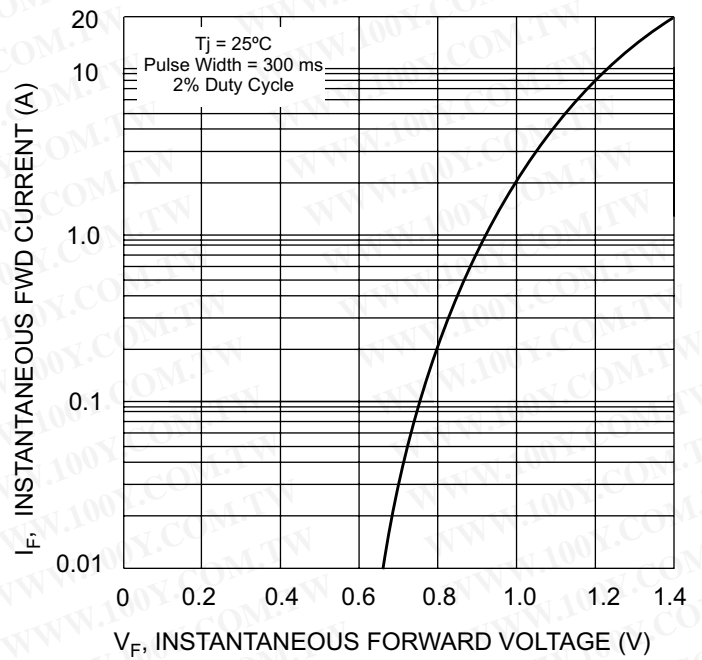


Fig. 2 Typical Forward Characteristics

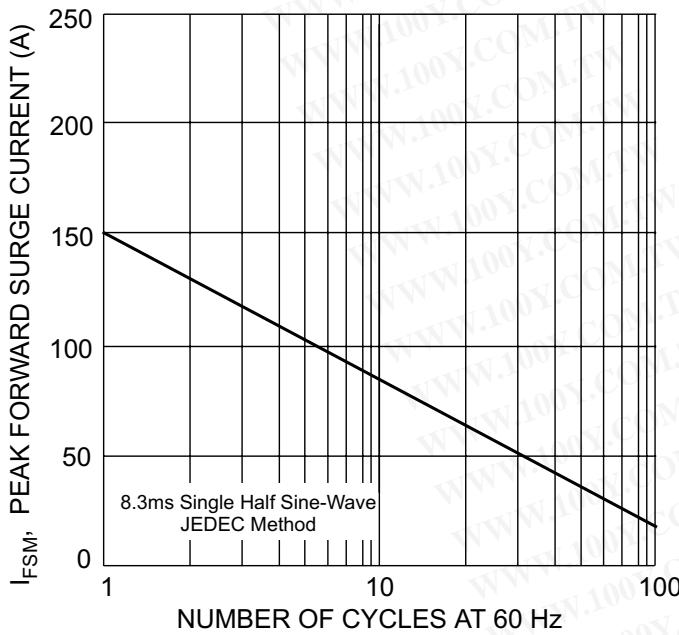


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

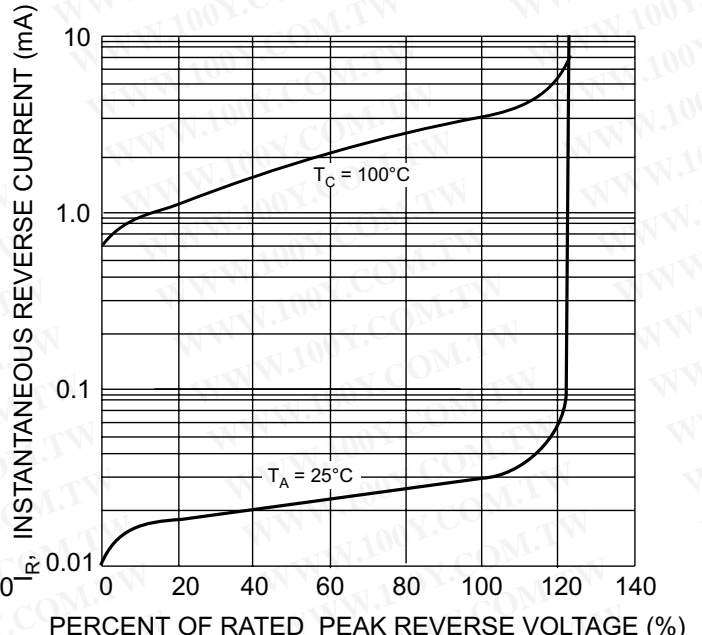


Fig. 4 Typical Reverse Characteristics, per element

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