

PBU1001 - PBU1007

10A BRIDGE RECTIFIER

NOT RECOMMENDED FOR NEW DESIGN USE GBU10005 - GBU1010

Low Forward Voltage Drop, High Current Capability

Surge Overload Rating to 300A Peak

Ideal for Printed Circuit Board Applications

Case to Terminal Isolation Voltage 1500V

Plastic Material: UL Flammability Classification Rating 94V-0

UL Listed Under Recognized Component

Index, File Number E95060

Lead Free Finish, RoHS Compliant (Date Code 0514+)

(Note 3)

Features

Mechanical Data

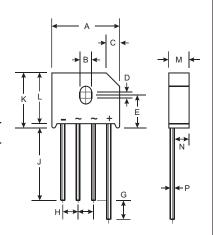
Case: Molded Plastic

Terminals: Silver Plated Leads Solderable per

MIL-STD-202, Method 208 Polarity: As Marked on Case

Mounting: Through Hole for #6 Screw Mounting Torque: 5.0 Inch-pounds Maximum

Weight: 8.0 grams (approx.) Marking: Type Number



PBU					
Dim	Min	Max			
Α	22.70	23.70			
В	3.80	4.10			
С	4.20	4.70			
D	1.70	2.20			
E	10.30	11.30			
G	4.50	6.80			
Н	4.80	5.80			
J	25.40				
K		19.30			
L	16.80	17.80			
M	6.60	7.10			
N	4.70	5.20			
Р	1.20	1.30			
All Dimensions in mm					

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

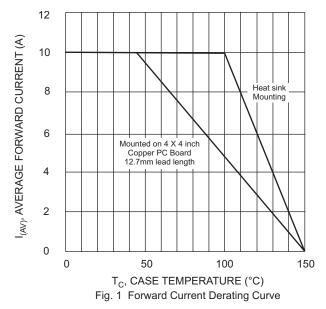
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

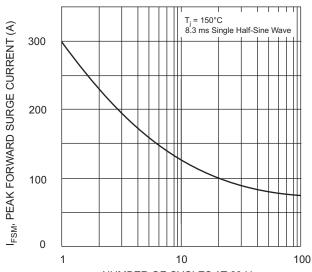
Characteristic	Symbol	PBU 1001	PBU 1002	PBU 1003	PBU 1004	PBU 1005	PBU 1006	PBU 1007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _C = 100 C I _O			10					Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load		300					Α		
Forward Voltage (per element) @ I _F = 5.0A	V _{FM}				1.0				V
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					10 1.0				μA mA
I ² t Rating for Fusing (Note 2)	I ² t				373				A ² s
Typical Thermal Resistance Junction to Case (Note 1)		2.2					°C/W		
Operating and Storage Temperature Range		-65 to +150					С		

Notes:

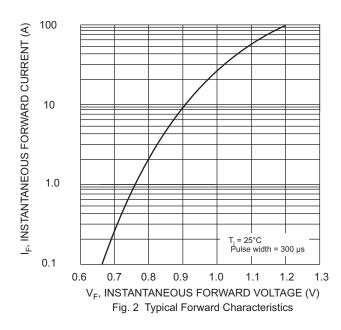
- ${\bf 1.}\ \ {\bf Thermal\ resistance\ junction\ to\ case\ mounted\ on\ heatsink}.$
- 2. Non-repetitive, for t > 1.0ms and t < 8.3ms.
- 3. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.







NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Forward Surge Current



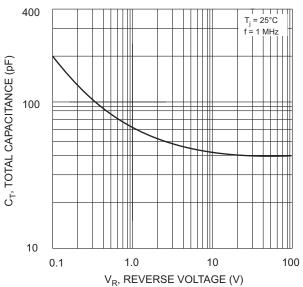
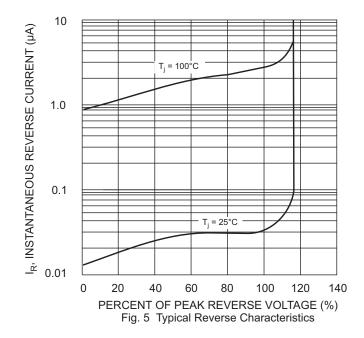


Fig. 4 Typical Total Capacitance per element





Ordering Information (Note 4)

Device	Packaging	Shipping		
PBU1001	PBU	0.5K Bulk		
PBU1002	PBU	0.5K Bulk		
PBU1003	PBU	0.5K Bulk		
PBU1004	PBU	0.5K Bulk		
PBU1005	PBU	0.5K Bulk		
PBU1006	PBU	0.5K Bulk		
PBU1007	PBU	0.5K Bulk		

Notes: 4. For packaging details, visit our website at http://www.diodes.com/datasheets/ap2008.pdf

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