



GBU10005 - GBU1010

10A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- **Glass Passivated Die Construction**
- High Case Dielectric Strength of $1500V_{RMS}$
- Low Reverse Leakage Current
- Surge Overload Rating to 220A Peak
- Ideal for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File Number E94661
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)

Mechanical Data

- Case: GBU
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Matte Tin Finish. Solderable per MIL-STD 202, Method 208 @3
- Polarity: Marked on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Marking: Date Code and Type Number
- Weight: 4 grams (approximate)

Ordering Information (Note 3)

	Part Number	Case	Packaging						
GBU10005-GBU1010		GBU	20/Tube						
Notes:	1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.								

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2. See http://www.diodes.com for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.

3. For packaging details, go to our website at http://www.diodes.com.

Maximum Ratings and Electrical Characteristics (@TA = +25°C, unless otherwise specified.)

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

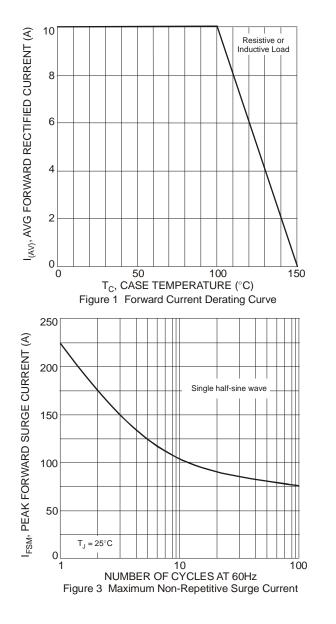
Characteristic		Symbol	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Forward Rectified Current (Note 4) @ T _C = +100°C			10						А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load			220					А		
Forward Voltage (per element) $@ I_F = 5.0A$		V _{FM}	1.0						V	
Peak Reverse Current at@ $T_C = +25^{\circ}C$ Rated DC Blocking Voltage@ $T_C = +125^{\circ}C$			5.0 500						μΑ	
I ² t Rating for Fusing (Note 5)			200					A ² s		
Typical Total Capacitance per Element (Note 6)			60					pF		
Typical Thermal Resistance Junction to Case (Note 4)			2.2					°C/W		
Operating and Storage Temperature Range		R _{θJC} T _{J,} T _{STG}	-55 to +150						°C	

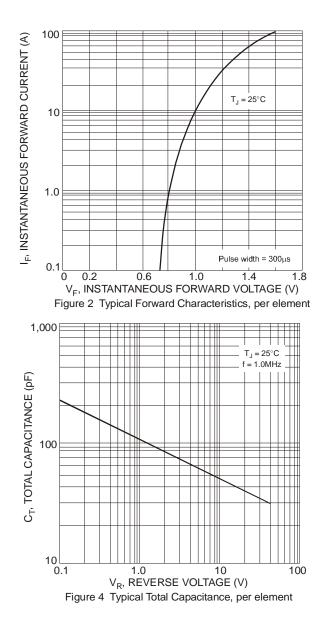
Notes: 4. Unit mounted on 100mm x 100mm x 1.6mm copper plate heatsink.

Non-repetitive, for t > 1.0ms and < 8.3ms. 5.

Measured at 1.0MHz and applied reverse voltage of 4.0V DC. 6.



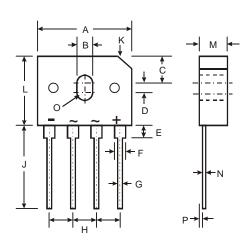






Package Outline Dimensions

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



GBU							
Dim	Min	Max					
Α	21.8	22.3					
В	3.5	4.1					
С	7.4	7.9					
D	1.65	2.16					
Е	2.25	2.75					
F	1.95	2.35					
G	1.02	1.27 5.33					
Н	4.83						
J	17.5	18.0					
K	3.2 X 45°						
L	18.3 18.8						
М	3.30 3.56						
Ν	0.46	0.56					
0	1.90R						
Р	P 0.76 1.0						
All Dimensions in mm							



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