



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.
- 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.)

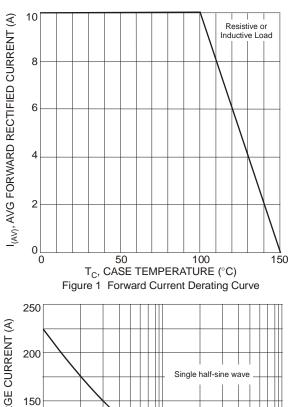
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

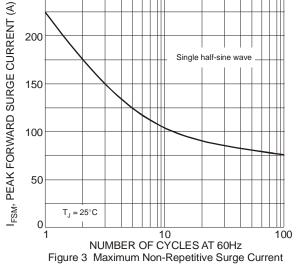
Characteristic		Symbol	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Forward Rectified Current (Note 4) @ T _C = +100°C		I _(AV)	10					Α		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	220					Α		
Forward Voltage (per element)	$@ I_F = 5.0A$	V_{FM}				1.0				V
Peak Reverse Current at Rated DC Blocking Voltage	@ T _C = +25°C @ T _C = +125°C	I _R	5.0 500			μА				
I ² t Rating for Fusing (Note 5)		l ² t	200					A ² s		
Typical Total Capacitance per Element (Note 6)		Ст	60					pF		
Typical Thermal Resistance Junction to Case (Note 4)		$R_{\theta JC}$	2.2					°C/W		
Operating and Storage Temperature Range		T _{J,} T _{STG}	-55 to +150					°C		

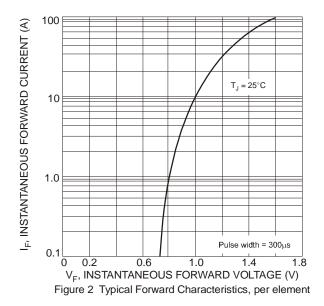
Notes:

- 4. Unit mounted on 100mm x 100mm x 1.6mm copper plate heatsink.
- 5. Non-repetitive, for t > 1.0ms and < 8.3ms.
- 6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.









1,000

T_J = 25°C

f = 1.0MHz

100

10

0.1

1.0

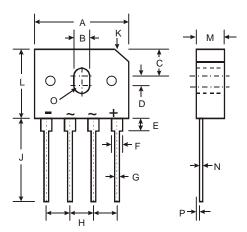
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V_R, REVERSE VOLTAGE (V)



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				
Н	4.83	5.33				
J	17.5	18.0				
K	3.2 X 45°					
L	18.3	18.8				
M	3.30	3.56				
N	0.46	0.56				
0	1.90R					
Р	0.76	1.0				
All Dimensions in mm						



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