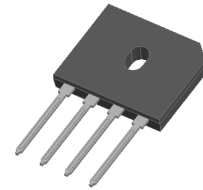


GBU8005 thru GBU810

Glass Passivated Single-Phase Bridge Rectifiers
 Voltage Range 50V to 1000V Forward Current 8A

Features

- UL recognition
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7s, per JESD 22-B106

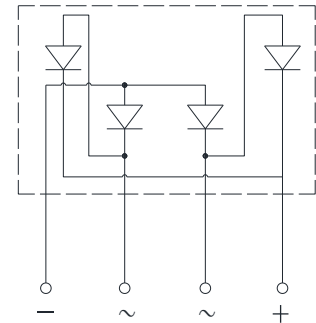


Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

Mechanical Data

- Package: GBU
 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per STD-002 and JESD22-B102
- Polarity: As marked on body



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C Unless otherwise specified)

Parameter	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz Sine Wave, R-load (With Heatsink, T _C =110°C)	I _O	8							A
Average Rectified Output Current @ 60Hz Sine Wave, R-load (Without Heatsink, T _A =25°C)		3.2							
Surge (Non-Repetitive) Forward Current @ 60Hz Half Sine Wave, 1 cycle, T _J =25°C	I _{FSM}	175							A
Current Squared Time @ 1ms ≤ t ≤ 8.3ms, T _J =25°C, Rating of Per Diode	I ² t	127							A ² S
Dielectric Strength @ Terminals to Case, AC 1 Minute	V _{dis}	2.5							KV
Mounting Torque @ Recommend Torque: 5kg.cm	T _{or}	8							kg.cm
Thermal Resistance, Between Junction and Ambient, Without Heatsink	R _{θJA}	25							°C/W
Thermal Resistance, Between Junction and Case, With Heatsink	R _{θJC}	2.3							
Junction Temperature	T _J	-55 to +150							°C
Storage Temperature	T _{STG}	-55 to +150							°C

Electrical Characteristics (T_A=25°C Unless otherwise specified)

Parameter	Symbol	Test Conditions	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810
Maximum Instantaneous Forward Voltage Drop Per Diode	V _F	I _{FM} =4A	1						
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Diode	I _{RRM}	V _{RM} =V _{RRM}	5						

GBU8005 thru GBU810

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Ratings and Characteristics Curves

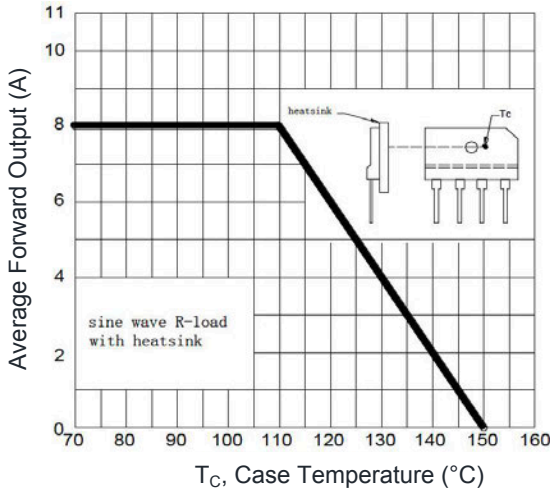


Figure 1. I_o - T_c Curve

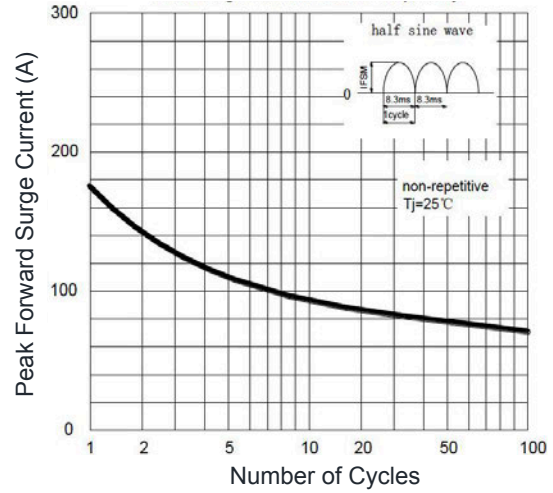


Figure 2. Surge Forward Current Capability

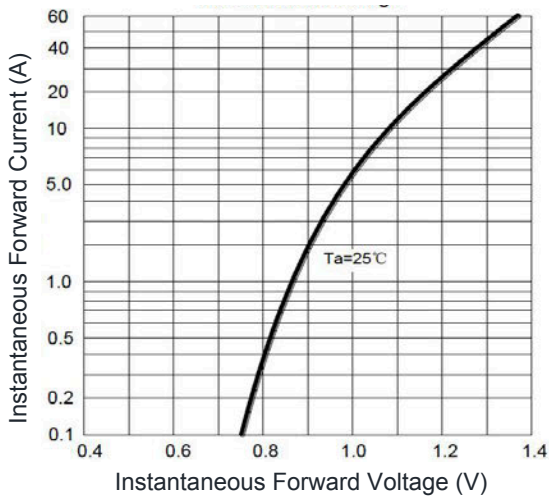


Figure 3. Typical Forward Voltage

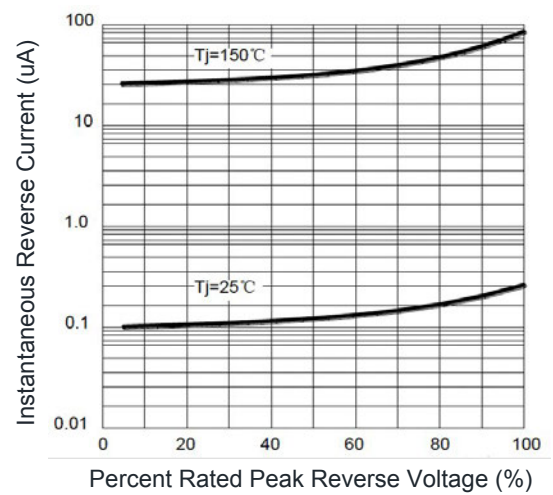
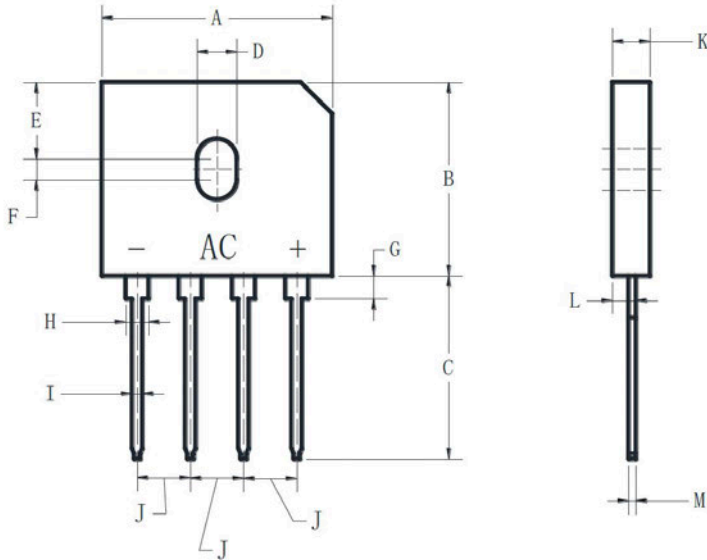


Figure 4. Typical Reverse Characteristics

GBU8005 thru GBU810

Glass Passivated Single-Phase Bridge Rectifiers
 Voltage Range 50V to 1000V Forward Current 8A

Package Outline Dimensions (GBU)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	21.800	22.300	0.858	0.878
B	18.300	18.800	0.720	0.740
C	17.500	18.000	0.689	0.709
D	3.500	4.100	0.138	0.161
E	7.400	7.900	0.291	0.311
F	1.650	2.160	0.065	0.085
G	1.910	2.540	0.075	0.100
H	2.060	2.540	0.081	0.100
I	1.020	1.270	0.040	0.050
J	4.830	5.330	0.190	0.210
K	3.300	3.560	0.130	0.140
L	2.400	2.660	0.094	0.105
M	0.460	0.560	0.018	0.022