

GBL005 THRU GBL10

Glass Passivated Single Phase Bridge Rectifiers

Features

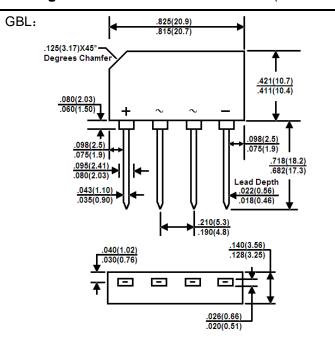
- * Plastic package has underwriters laboratory flammability classification 94V-0
- * Ideal for printed circuit boards
- * Glass passivated chip junction
- * High Surge Current Capability
- * High temperature soldering guaranteed 270°C/10 seconds, 0.375(9.5mm) lead length

Mechanical Data

* Case: Molded plastic body over passivated junctions



Package Outline Dimensions in inches (millimeters)



Polarity shown on front side of case, positive lead beveled corner

Maximum Ratings and Electrical Characteristics

Rating at 25 $\,^{\circ}\mathrm{C}\,$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	GBL 005	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 10	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
	I _{F(AV)}	4.0 (Note1) 3.0 (Note2)					Α		
Peak Forward Surge Current single half sine-wave superimposed on rated load	I _{FSM}	150				Α			
Rating for fusing (t<8.3ms)	l²t	93				A ² sec			
Typical thermal resistance per leg	R ₀ _{JA} R ₀ _{JC}	22 (Note2) 3.5 (Note1)					°C/W		
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150			$^{\circ}$				
Maximum instantaneous forward voltage drop per leg at 2.0A	V_{F}	1.0			V				
Maximum Reverse Current @ T_A =25 $^{\circ}$ C at Rated D.C Blocking Voltage @ T_A =125 $^{\circ}$ C	I_R	5.0 500					μА		
Typical junction capacitance per leg at 4V /1MHz	CJ		9)5			40		рF

Note: 1 \upomega Unit mounted on 3.0 \upomega 3.0 \upomega 0.11" thick (7.5 \upomega 7.5 \upomega 0.3cm) Al. plate.

2. Unit mounted on P.C.B. with 0.5×0.5 " (12×12mm) copper pads and 0.375" (9.5mm) lead length.

Version: 6.1 www.jgdsemi.com



GBL005 THRU GBL10

Glass Passivated Single Phase Bridge Rectifiers

Ratings and Characteristic Curves

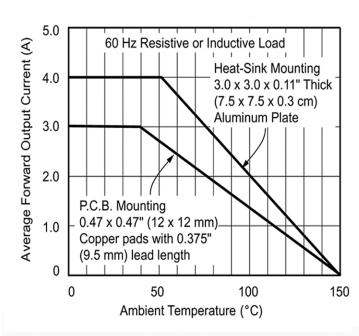


Figure 1. Derating Curves Output Rectified Current

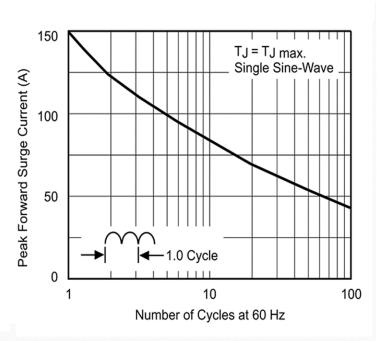


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

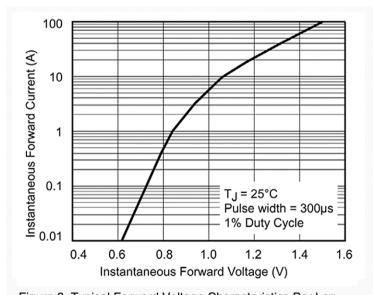


Figure 3. Typical Forward Voltage Characteristics Per Leg

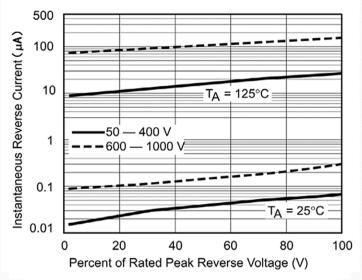


Figure 4. Typical Reverse Characteristics Per Leg

Version: 6.1 www.jgdsemi.com



GBL005 THRU GBL10

Glass Passivated Single Phase Bridge Rectifiers

Ordering Information

Part No.	Package	Packing		
GBL005~ GBL10	GBL	20pcs/Tube		

Version: 6.1 www.jgdsemi.com