

GBLA005 THRU GBLA10

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 4.0A

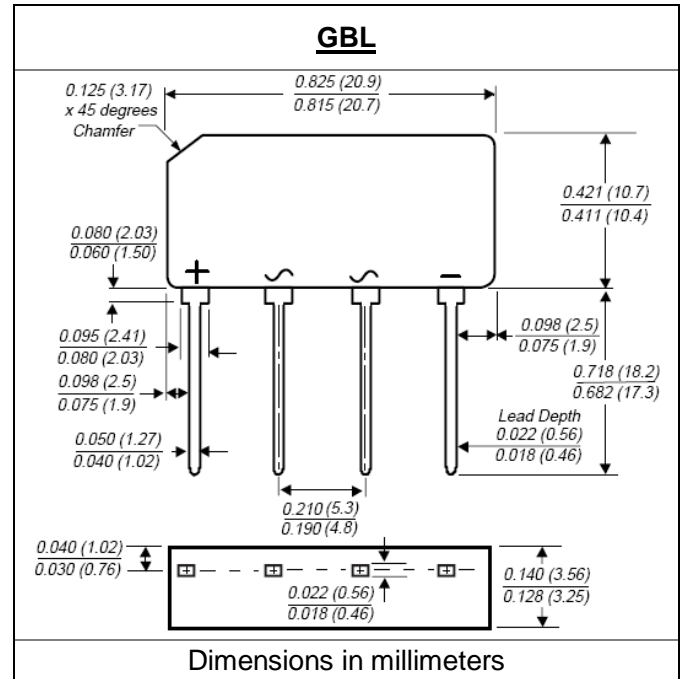


Features

Glass passivated chip junction
High case dielectric strength
High surge current capability
Ideal for printed circuit board
This series is UL listed under Recognized Component Index, file number E330278

Mechanical Data

Terminal: Plated leads solderable per J-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	GBLA 005	GBLA 01	GBLA 02	GBLA 04	GBLA 06	GBLA 08	GBLA 10	units	
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 DC blocking voltage	V _{dc}	50	100	200	400	600	800	1000	V	
Maximum average forward rectified output current T _c = 50°C (Note1) T _a = 40°C (Note2)	I _{f(av)}					4.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}					120				A
Maximum instantaneous forward voltage drop per leg at 4.0A	V _f					1.0				V
Rating for fusing (t < 8.3ms)	I ² t					60				A ² Sec
Maximum DC reverse current at rated DC blocking voltage per leg T _a = 25°C T _a = 125°C	I _r					5.0 500				μA
Maximum thermal resistance per leg	R _{th(ja)} R _{th(jc)}					47.0 10.0				°C/W
Operating junction and storage temperature range	T _j , T _{stg}					-55 to +150			°C	

Note:

- Unit mounted on P.C.B. with 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3 cm) Aluminum plate
- Unit mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads
- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

RATINGS AND CHARACTERISTIC CURVES GBLA005 THRU GBLA10

Fig. 1 – Derating Curves Output Rectified Current

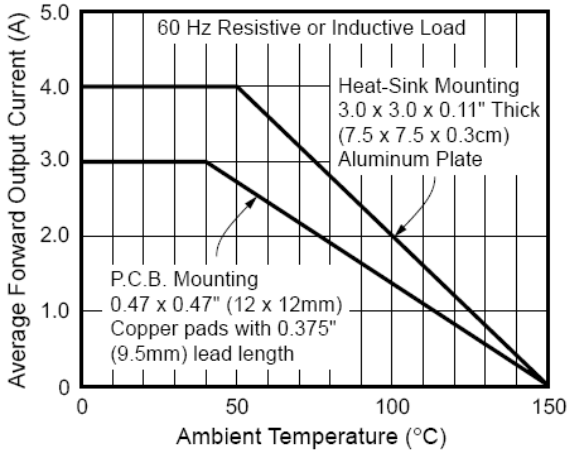


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

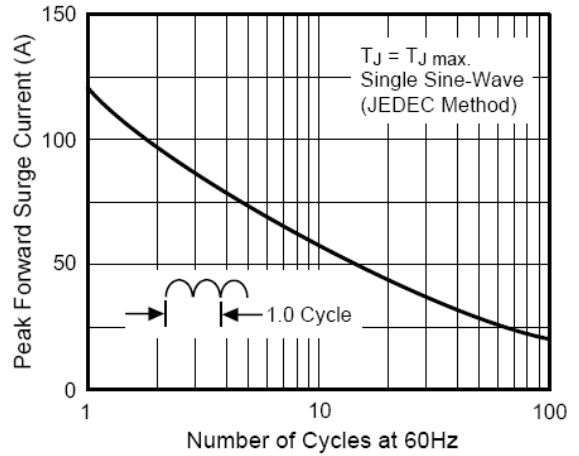


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

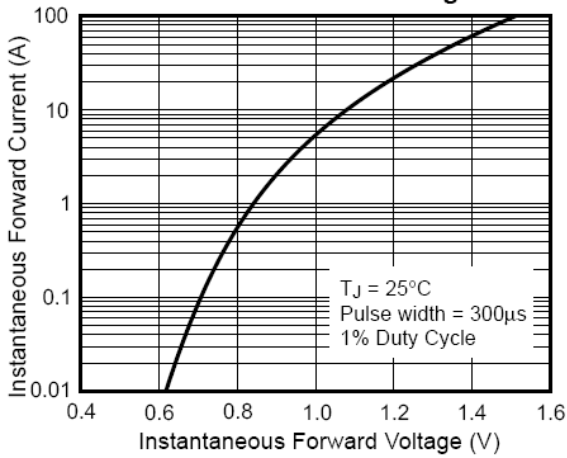


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

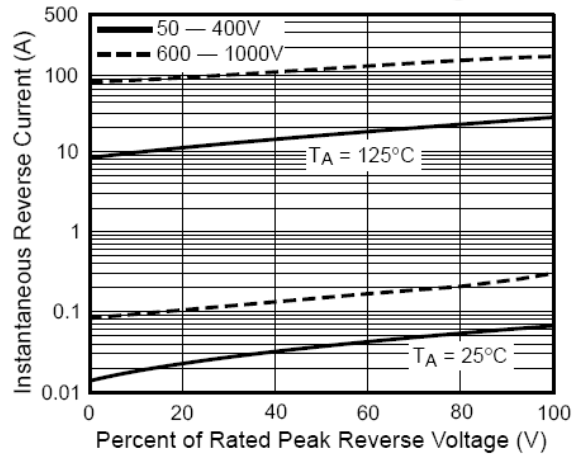


Fig. 5 – Typical Junction Capacitance Per Leg

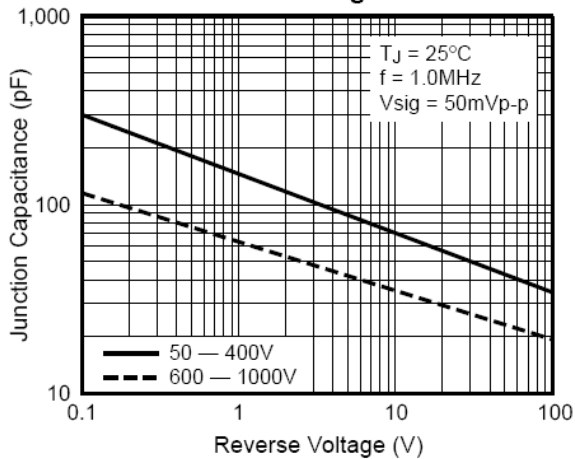


Fig. 6 – Typical Transient Thermal Impedance Per Leg

