

GBL005 THRU GBL10

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

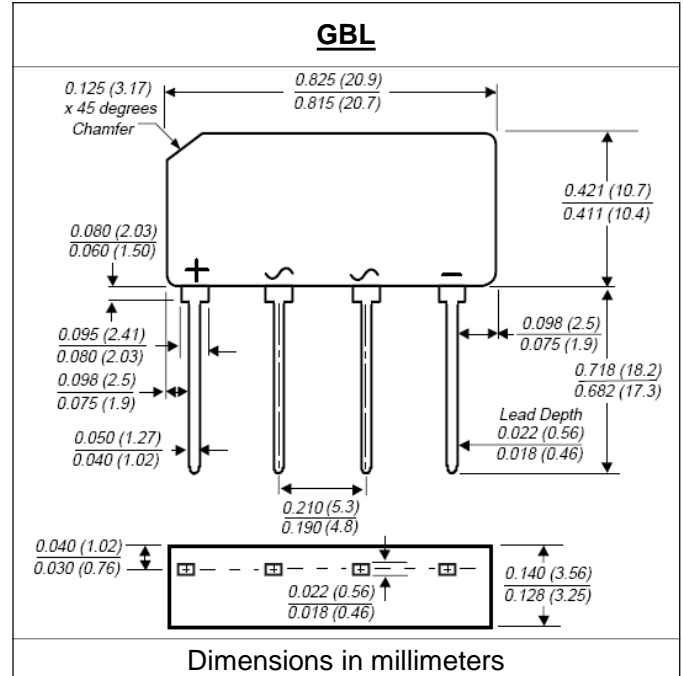
Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E,
Method 208C

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,
for capacitive load, derate current by 20%)

	Symbol	GBL0 05	GBL0 1	GBL0 2	GBL0 4	GBL0 6	GBL0 8	GBL1 0	units
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current	Tc = 50℃(Note1) Ta = 40℃(Note2) If(av)	4.0 3.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	150							A
Maximum instantaneous forward voltage drop per leg at 4.0A	Vf	1.0							V
Rating for fusing (t < 8.3ms)	I²t	93							A²Sec
Maximum DC reverse current at rated DC blocking voltage per leg	Ta = 25℃ Ta = 125℃ Ir	5.0 500							μA
Maximum thermal resistance per leg	Rth(ja) Rth(jc)	22 3.5							℃/W
Typical junction capacitance per leg at 4.0V,1MHz	Cj	95				40			pF
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

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

RATINGS AND CHARACTERISTIC CURVES GBL005 THRU GBL10

Fig. 1 – Derating Curves Output Rectified Current

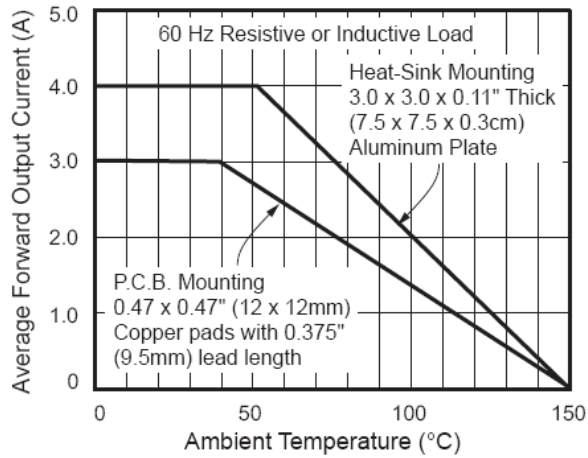


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

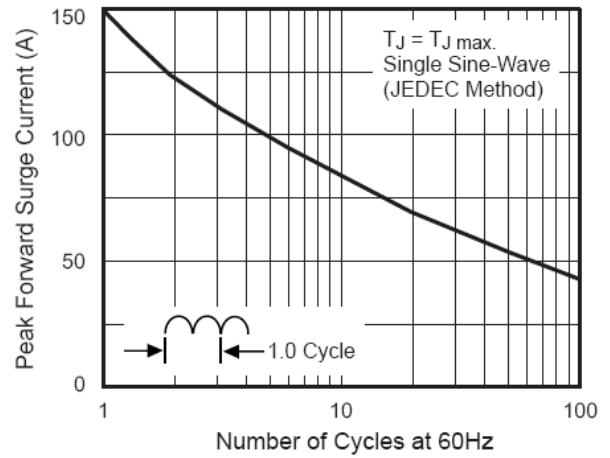


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

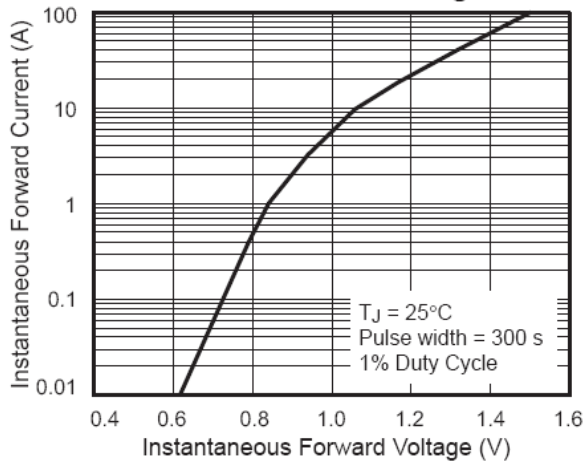


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

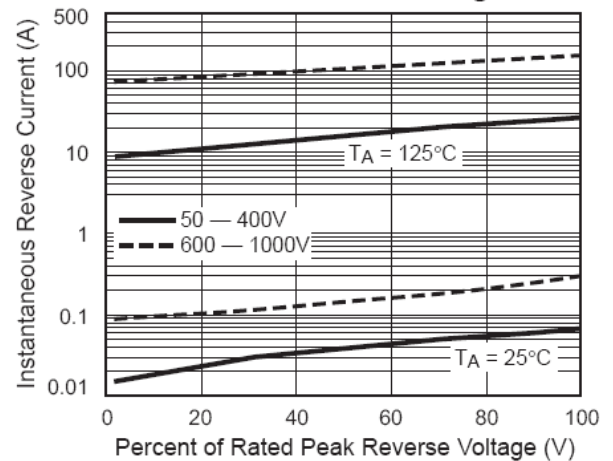


Fig. 5 – Typical Junction Capacitance Per Leg

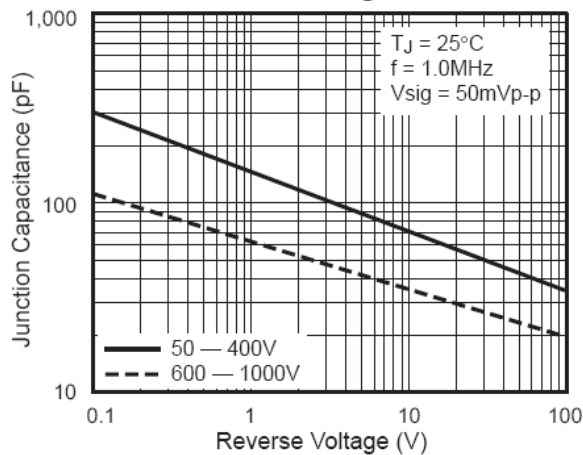


Fig. 6 – Typical Transient Thermal Impedance Per Leg

