



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBL005 THRU GBL10

**VOLTAGE RANGE
CURRENT**

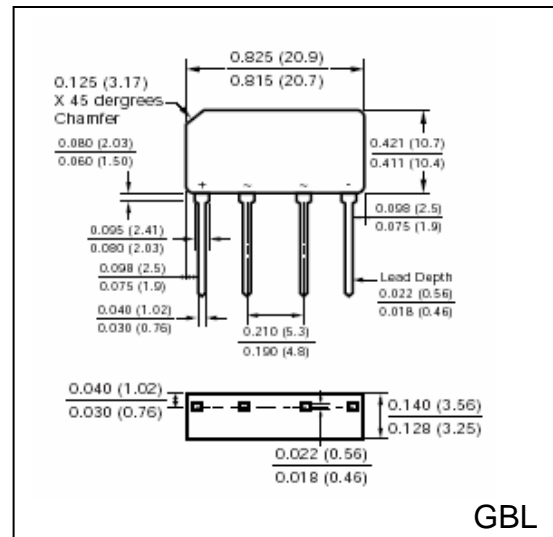
**50 to 1000 Volts
4.0 Ampere**

FEATURES

- Plastic package has UL flammability Classification 94V – 0
- Glass passivated chip junction
- High case dielectric strength of 1500 V_{RMS}
- High surge current capability
- High temperature soldering guaranteed:
260 °C /10 seconds, 0.375” (9.5mm) lead length

MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: any
- Weight: 0.15 ounce, 4.0 gram



GBL

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	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	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current T _C = 50°C (Note 1) T _C = 50°C (Note 2)	I _(AV)	4.0 3.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amps
Rating for Fusing (t<8.3mS)	I ² t	93							A ² s
Maximum Instantaneous Forward Voltage drop per Bridge element 3.0A	V _F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R	5.0 500							μA
Typical Junction Capacitance, per leg (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C _J	95				40			pF
Typical Thermal Resistance (Note 1) (Note 2)	R _{θJA}	22.0 3.5							°C/W
Operating Junction Temperature Range	T _J	(-55 to +150)							°C
Storage Temperature Range	T _{STG}	(-55 to +150)							°C

Notes:

1. Unit mounted on 3.0” x 3.0” x .011” (7.5cm x 7.5cm x 0.3cm) AL Plate
2. Unit mounted on PCB at 0.375” (9.5mm) lead length and 0.5” x 0.5” (12mm) copper pads



RATINGS AND CHARACTERISTIC CURVES GBL005 THRU GBL10

Fig. 1 – Derating Curves Output Rectified Current

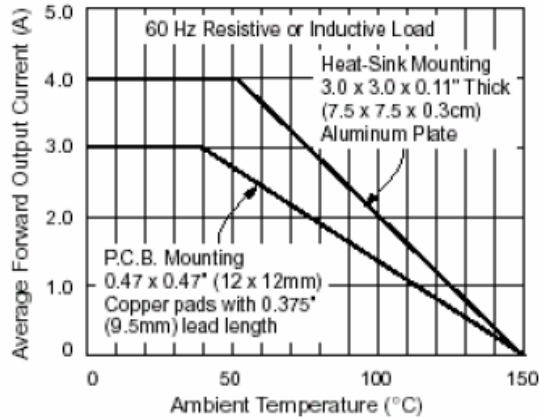


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

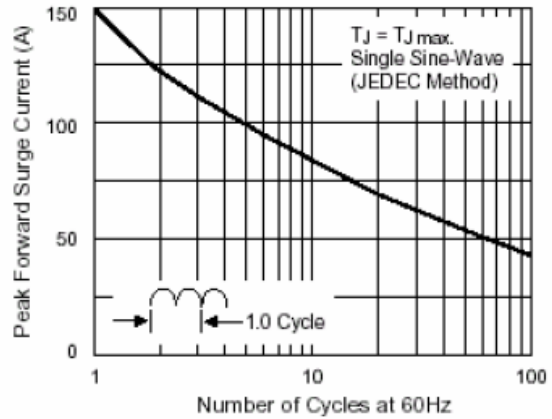


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

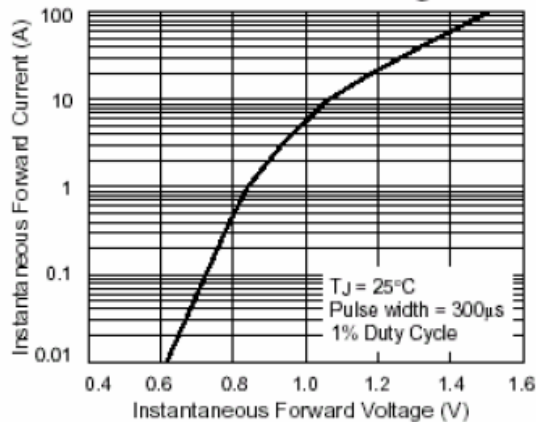


Fig. 4 -- Typical Reverse Leakage Characteristics Per Leg

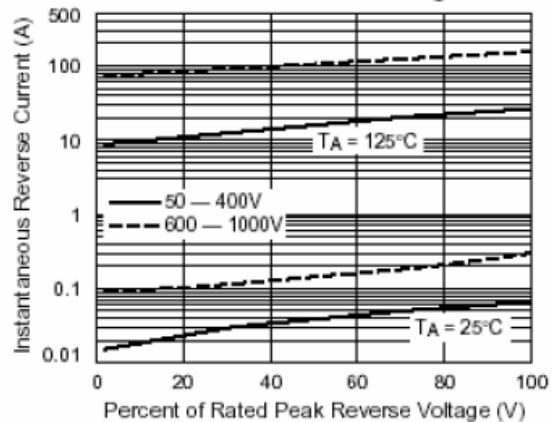


Fig. 5 – Typical Junction Capacitance Per Leg

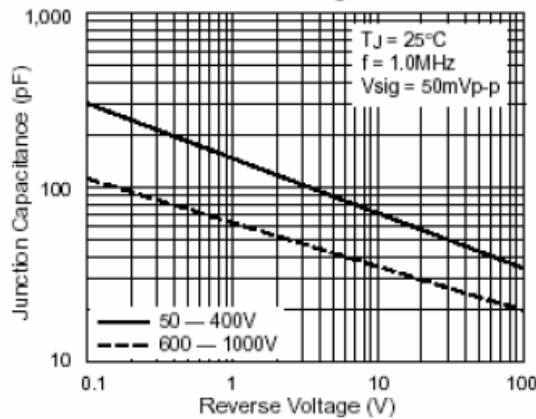


Fig. 6 – Typical Transient Thermal Impedance Per Leg

