

GBL4100-1

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 1600V

Current: 4.0A



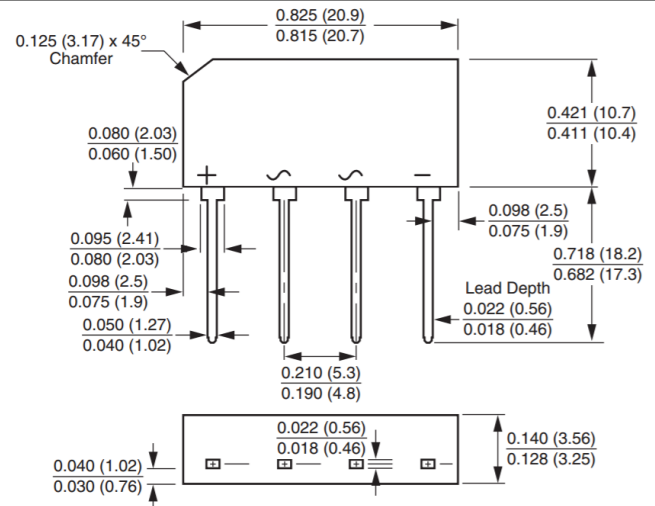
Features

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

GBL-1



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	GBL4100-1	units
Maximum repetitive peak reverse voltage	V _{rrm}	1600	V
Maximum RMS voltage	V _{rms}	1120	V
Maximum DC blocking voltage	V _{dc}	1600	V
Maximum average forward rectified output current T _c = 50°C (Note1) T _a = 40°C (Note2)	I _{f(av)}	4.0 3.0	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	150	A
Maximum instantaneous forward voltage drop per leg at 4.0A	V _f	1.1	V
Rating for fusing (t < 8.3ms)	I ² t	93	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)}	22 3.5	°C/W
Typical junction capacitance per leg at 4.0V, 1MHz	C _j	40	pF
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

RATINGS AND CHARACTERISTIC CURVES GBL4100-1

Fig. 1 - Derating Curves Output Rectified Current

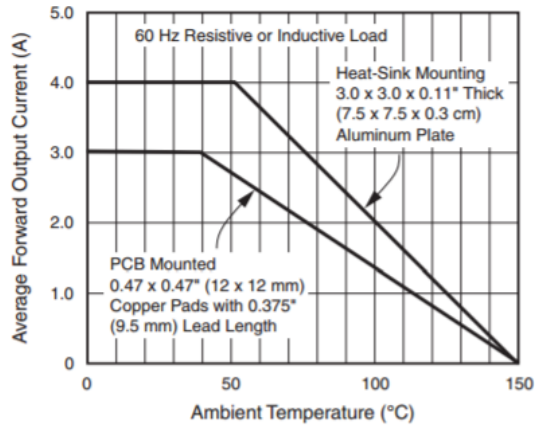


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

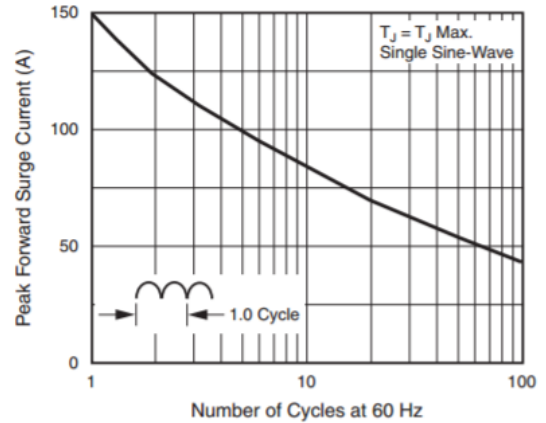


Fig. 3 - Typical Forward Voltage Characteristics Per Leg

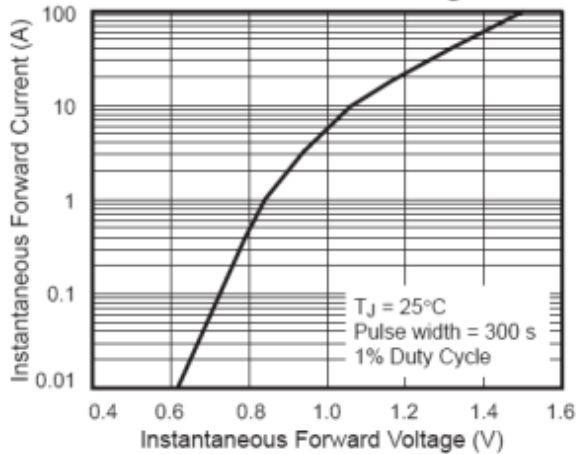


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

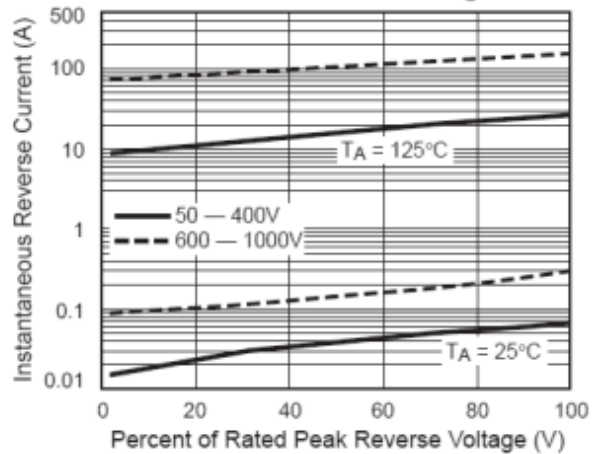


Fig. 5 - Typical Junction Capacitance Per Leg

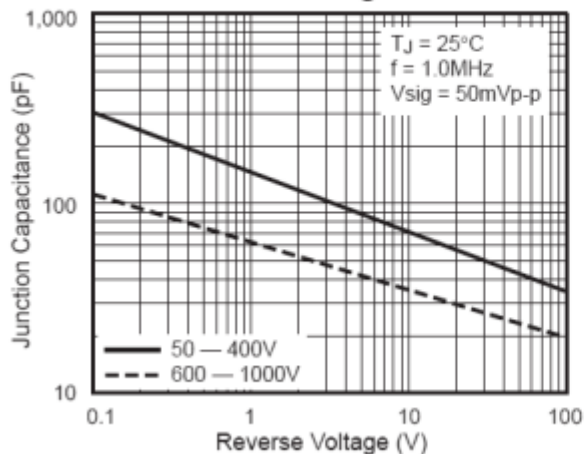


Fig. 6 - Typical Transient Thermal Impedance Per Leg

