G2SBA480-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V Current:4.0A

GULF SEMI

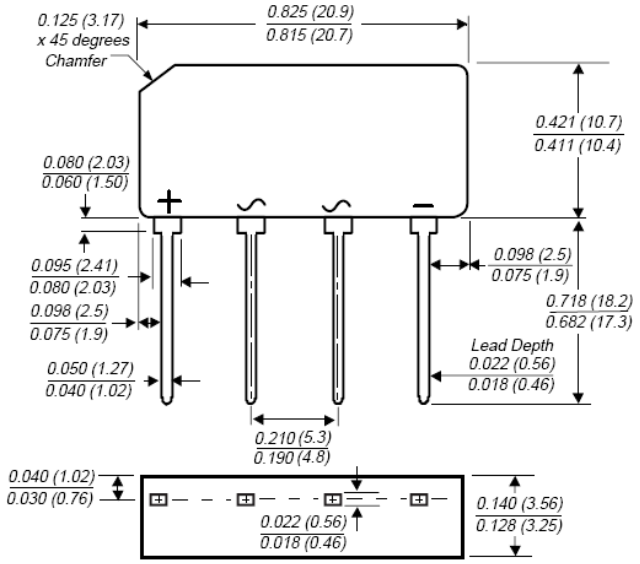
Features

Plastic package has Underwriters Laboratory Flammability Classification 94V-0
Glass passivated chip junction
High case dielectric strength
Typical I_R less than 0.1 μ A
High surge current capability
Ideal for printed circuit board
High temperature soldering guaranteed:
260 ℃ /10 seconds, 0.375”(9.5mm) lead length, 5lbs.(2.3kg) tension

Mechanical Data

Terminal: Plated leads solderable per MIL-STD 750, Method 2026
Case: Molded plastic body over passivated junctions
Polarity: Polarity symbol marked on body
Mounting position: any

GBL



Dimensions in millimeters

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	G2SBA480-E	units
Maximum repetitive peak reverse voltage	Vrrm	800	V
Maximum RMS voltage	Vrms	560	V
Maximum DC blocking voltage	Vdc	800	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	120	A
Maximum instantaneous forward voltage drop per leg at 2.0A	Vf	1.0	V
Rating for fusing (t < 8.3ms)	I^2t	60	A^2Sec
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)	47.0 / 10.0	℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150	℃

Note:
1. 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
2. Unit mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5"(12 x 12mm) copper pads
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

Fig. 1 – Derating Curves Output Rectified Current

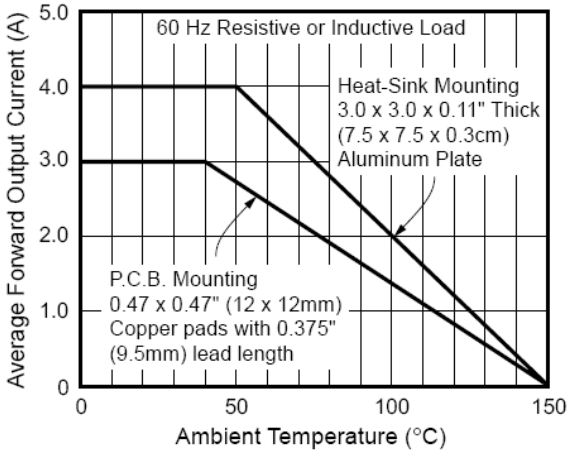


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

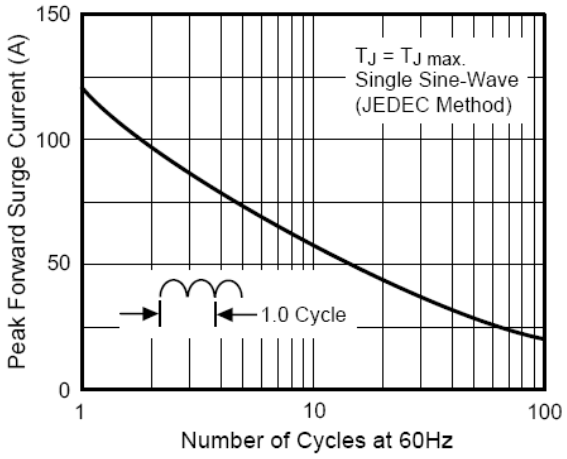


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

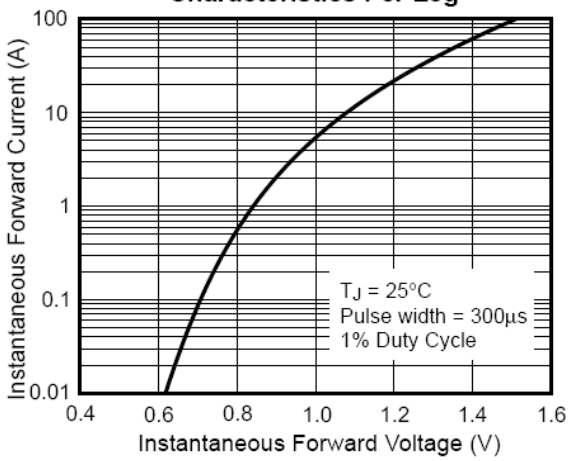


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

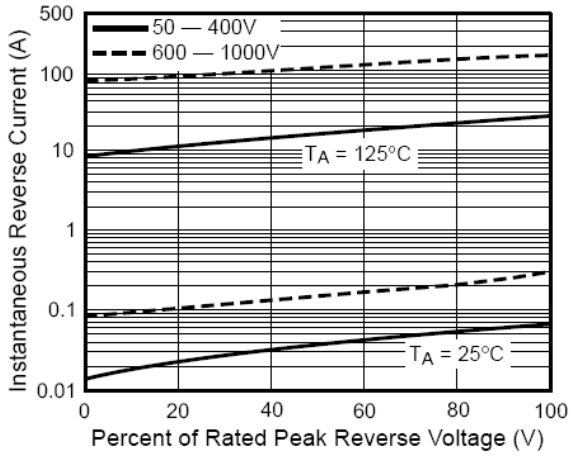


Fig. 5 – Typical Junction Capacitance Per Leg

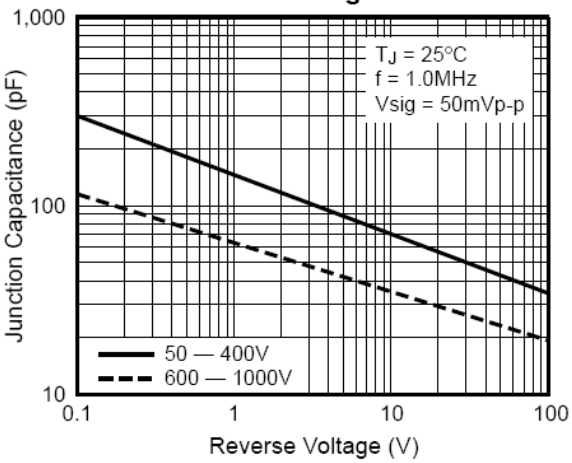


Fig. 6 – Typical Transient Thermal Impedance Per Leg

