G2SBA460 THRU G2SBA480

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V to 800V Current:4.0A

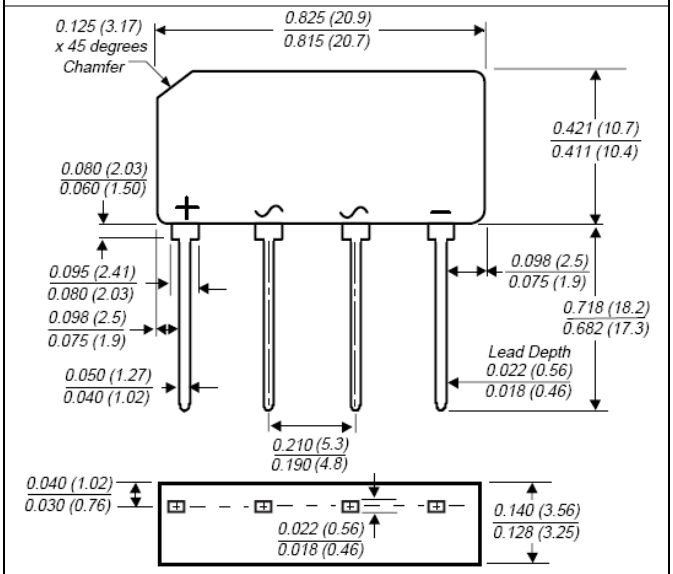
Features

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



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	G2SBA460	G2SBA480	units
Maximum repetitive peak reverse voltage	Vrrm	600	800	V
Maximum RMS voltage	Vrms	420	560	V
Maximum DC blocking voltage	Vdc	600	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°C / Ta = 125°C	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

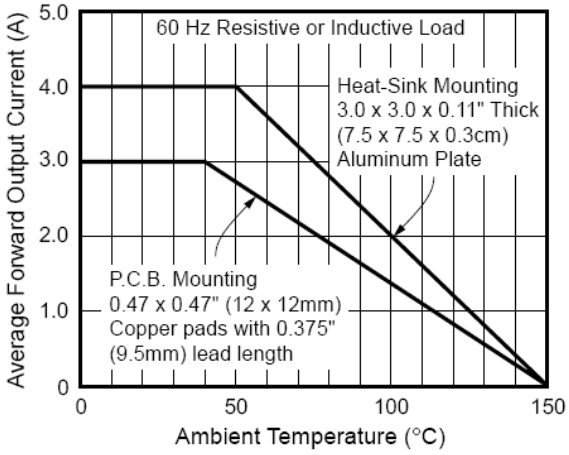


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

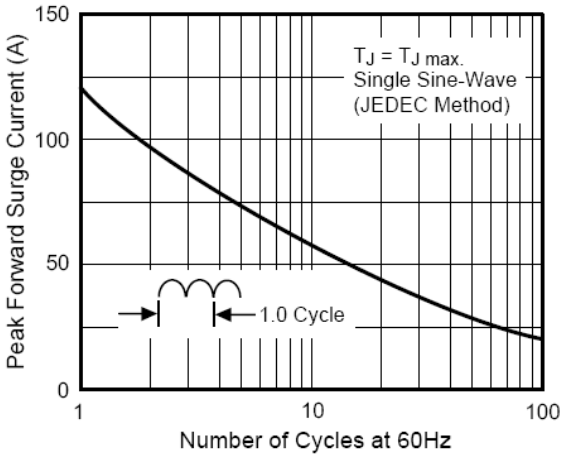


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

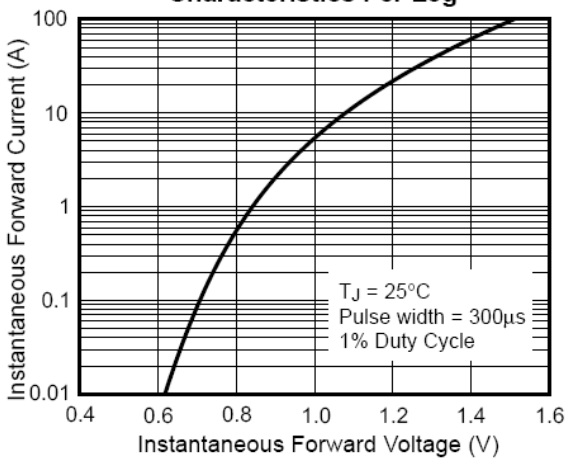


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

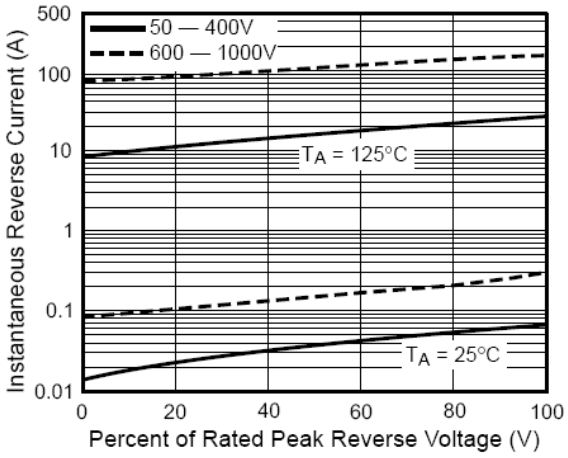


Fig. 5 – Typical Junction Capacitance Per Leg

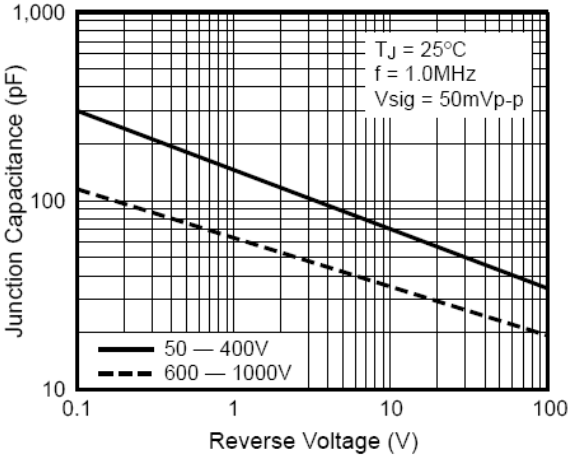


Fig. 6 – Typical Transient Thermal Impedance Per Leg