G2SB460-E THRU G2SB480-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V to 800V Current:4.0A

GULF SEMI

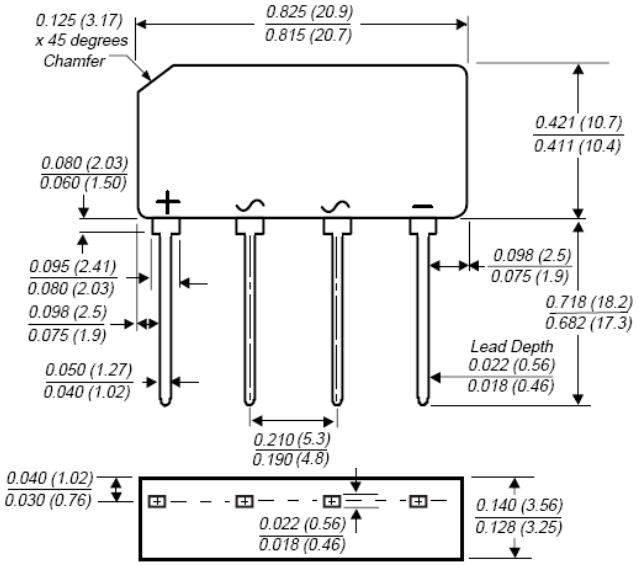
Features

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

Mechanical Data

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight: 0.071 oz., 2.0 g

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	G2SB460-E	G2SB480-E	units
Maximum Recurrent 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 at Tc=50℃(Note1) Ta=40℃(Note2)	If(av)	4.0 3.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150		A
Maximum Instantaneous Forward Voltage at forward current 2.0A	Vf	1.0		V
Rating for fusing (t<8.3ms)	I^2t	93		A^2Sec
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	Ir	5.0 500		μA
Typical thermal resistance per leg	Rth(ja) Rth(jl)	47 10		℃/W
Storage and Operation Junction Temperature	Tj, Tstg	-55 to +150		℃

Note:
1. Unit mounted on 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

Fig. 1 -- Derating Curves Output Rectified Current

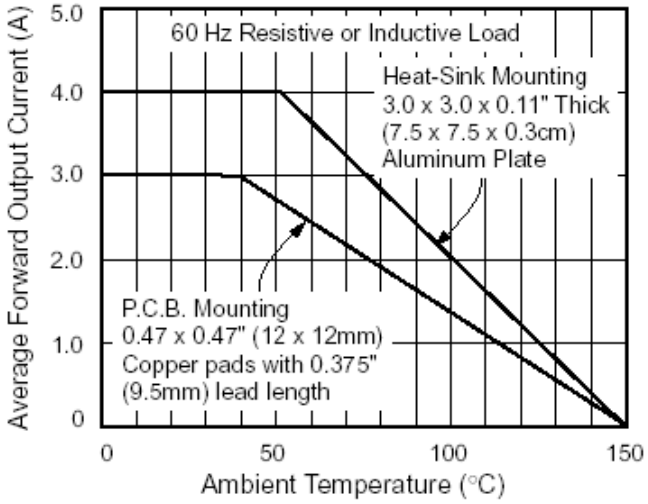


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

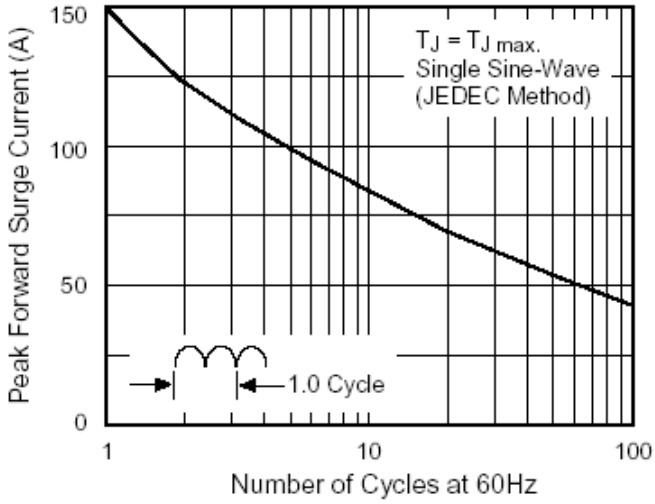


Fig. 3 -- Typical Forward Voltage Characteristics Per Leg

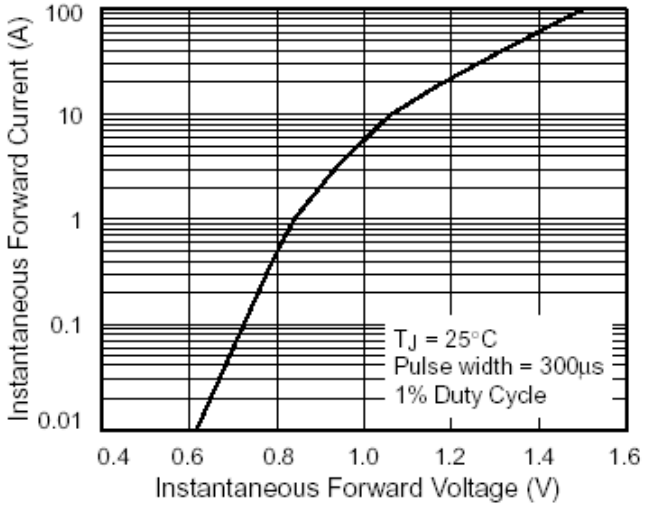


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

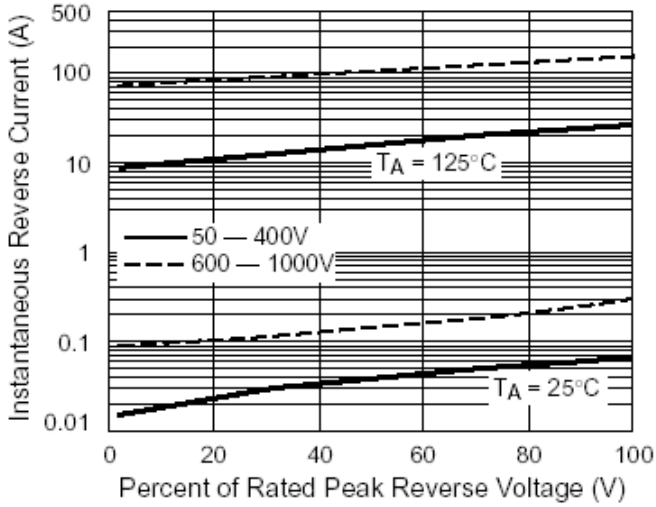


Fig. 5 -- Typical Junction Capacitance Per Leg

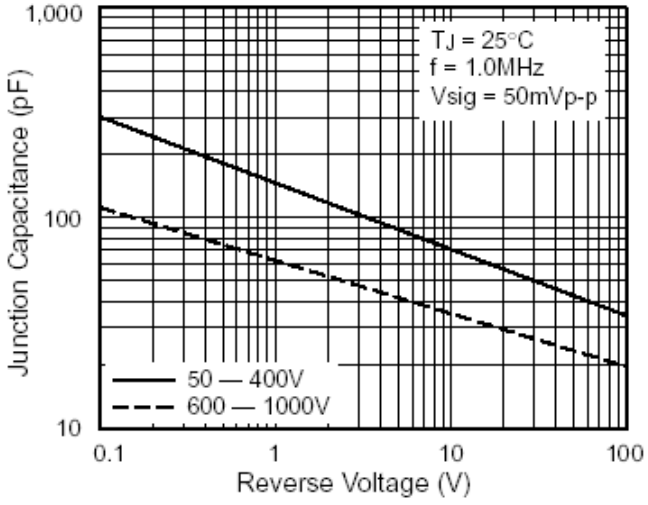


Fig. 6 -- Typical Transient Thermal Impedance Per Leg