G2SB405 THRU G2SB4100

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current: 4.0A

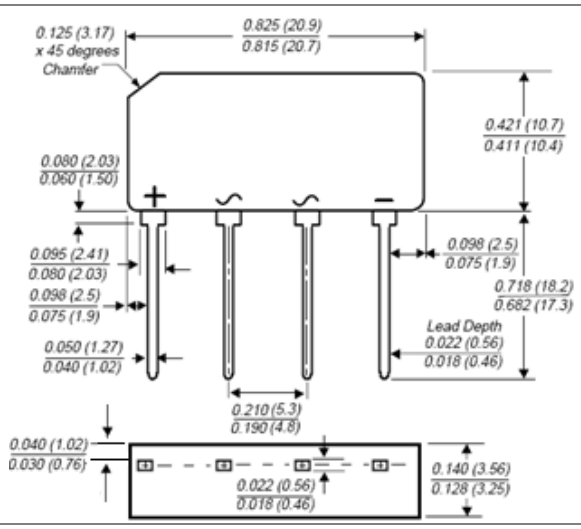
Features

Plastic package has Underwriters Laboratory Flammability Classification 94V-0
Glass passivated chip junction
High case dielectric strength
High surge current capability
Ideal for printed circuit boards
This series is UL listed under Recognized Component Index, file number E330278

Mechanical Data

Terminals: Plated leads solderable per J-STD-002
Case: Molded plastic body over passivated junctions
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	G2SB 405	G2SB 410	G2SB 420	G2SB 440	G2SB 460	G2SB 480	G2SB 4100	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward Tc=50°C(Note1) rectified output current at Ta=40°C(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 4.0A	Vf	1.0							V
Rating for fusing (t<8.3ms)	I^2t	93							A^2Sec
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 500							μA
Typical thermal resistance per leg	Rth(ja) Rth(jl) Rth(jc)	47 10 3.5							℃/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

RATINGS AND CHARACTERISTIC CURVES G2SB405 THRU G2SB4100

Fig. 1 -- Derating Curves Output Rectified Current

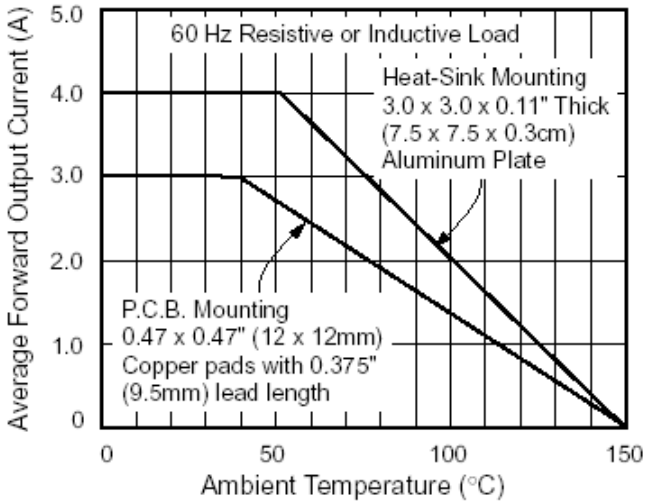


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

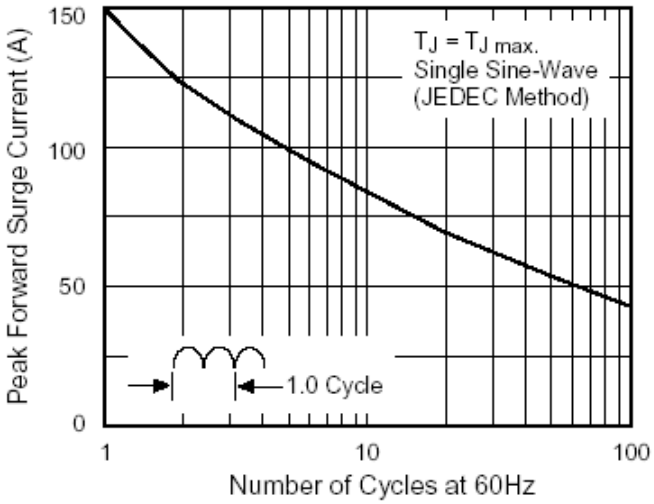


Fig. 3 -- Typical Forward Voltage Characteristics Per Leg

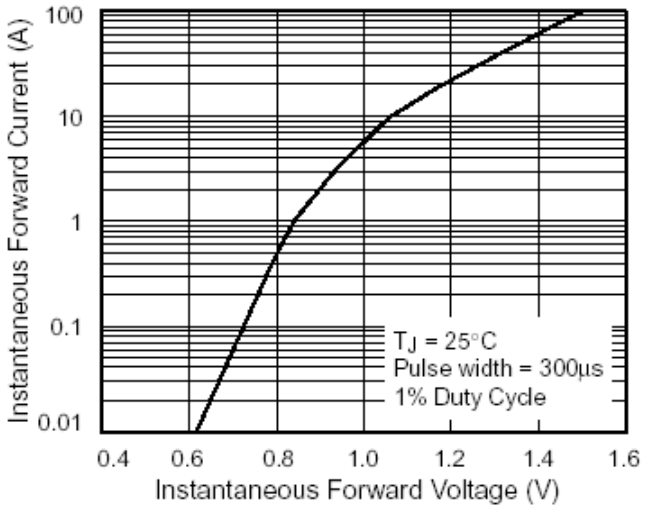


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

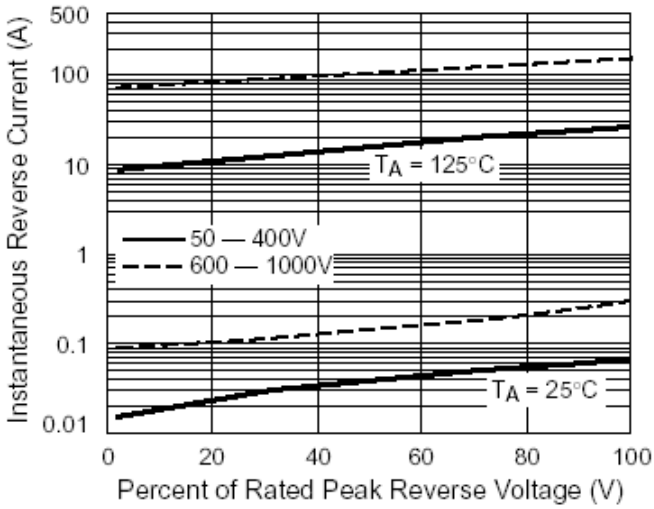


Fig. 5 -- Typical Junction Capacitance Per Leg

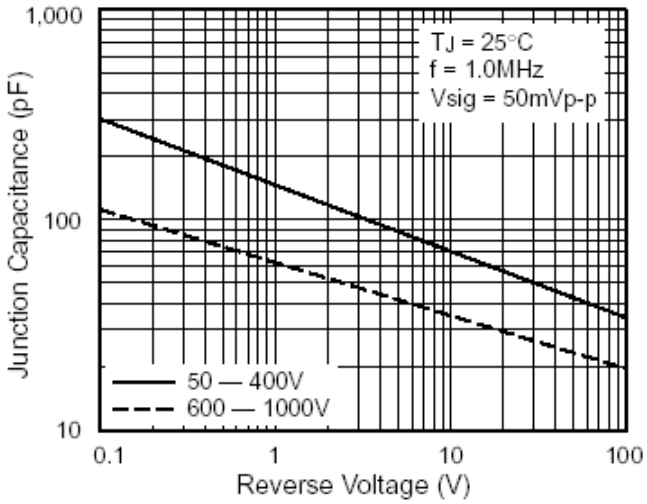


Fig. 6 -- Typical Transient Thermal Impedance Per Leg