

# G2SB05 THRU G2SB100

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 1.5A

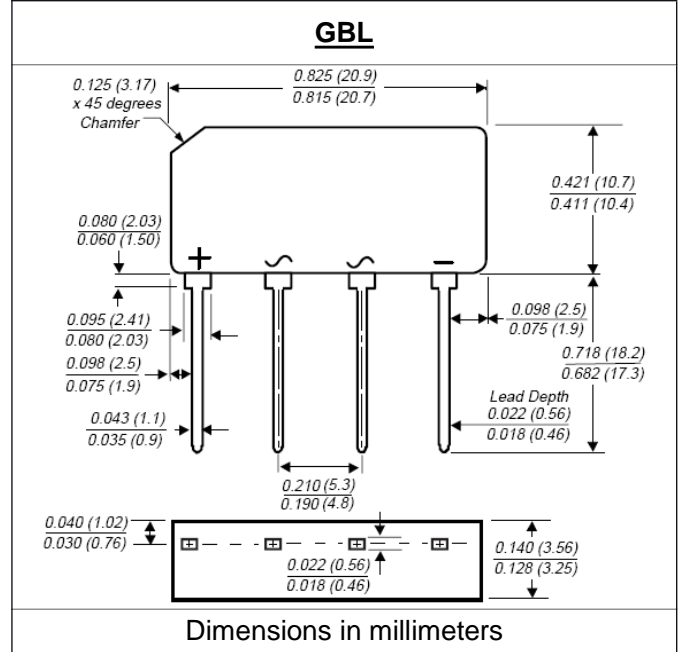


### Features

Glass passivated chip junction  
Ideal for printed circuit board  
High case dielectric strength  
High surge current capability

### Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E,  
Method 208C  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: any



### 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%)

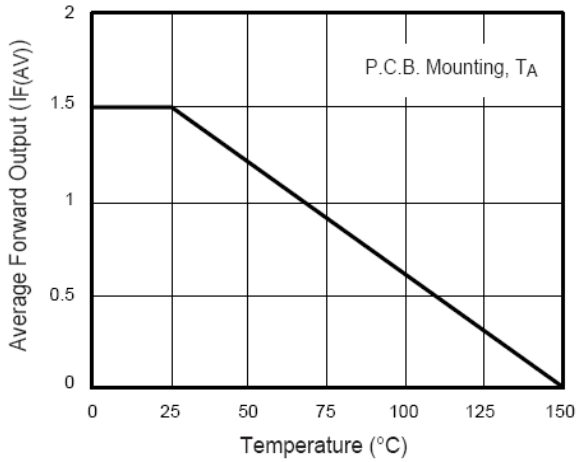
	Symbol	G2SB 05	G2SB 10	G2SB 20	G2SB 40	G2SB 60	G2SB 80	G2SB 100	units
Maximum repetitive peak reverse voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current Ta = 25°C	I <sub>f(av)</sub>	1.5							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I <sub>fsm</sub>	80							A
Maximum instantaneous forward voltage drop per leg at 0.75A	V <sub>f</sub>	1.0							V
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	27							A <sup>2</sup> Sec
Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C	I <sub>r</sub>	5.0 300							μA
Maximum thermal resistance per leg	R <sub>th(ja)</sub> R <sub>th(jc)</sub>	40.0 12.0							°C/W
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150							°C

Note:

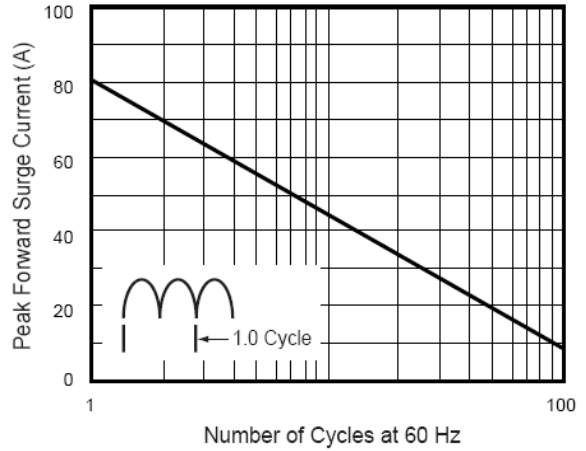
- Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length

**RATINGS AND CHARACTERISTIC CURVES G2SB05 THRU G2SB100**

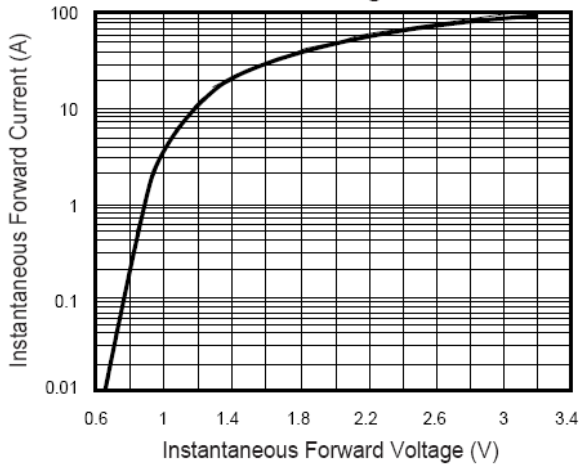
**Fig. 1 - Derating Curve Output Rectified Current**



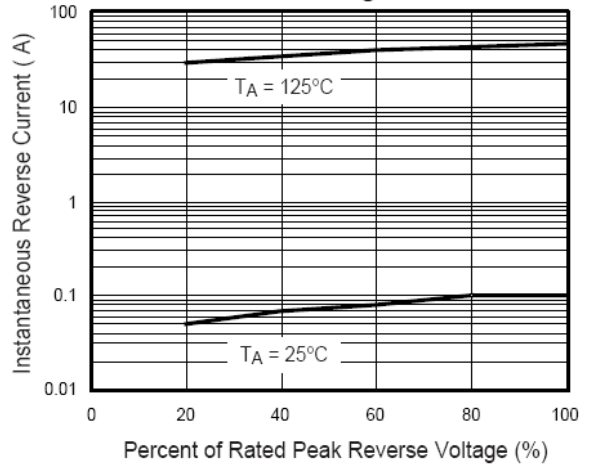
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



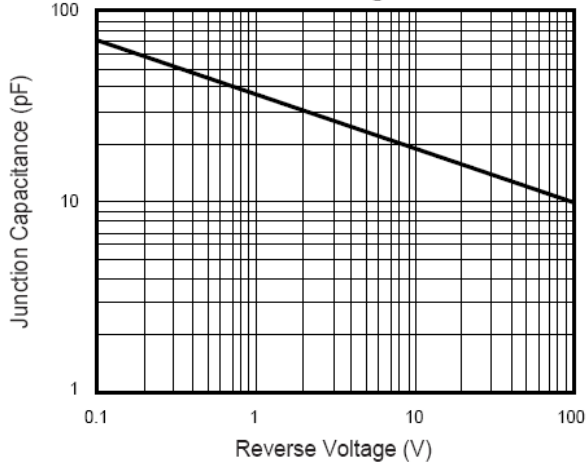
**Fig. 3 - Typical Forward Characteristics Per Leg**



**Fig. 4 - Typical Reverse Characteristics Per Leg**



**Fig. 5 - Typical Junction Capacitance Per Leg**



**Fig. 6 - Typical Transient Thermal Impedance**

