

G8XB05 THRU G8XB100

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 8.0A



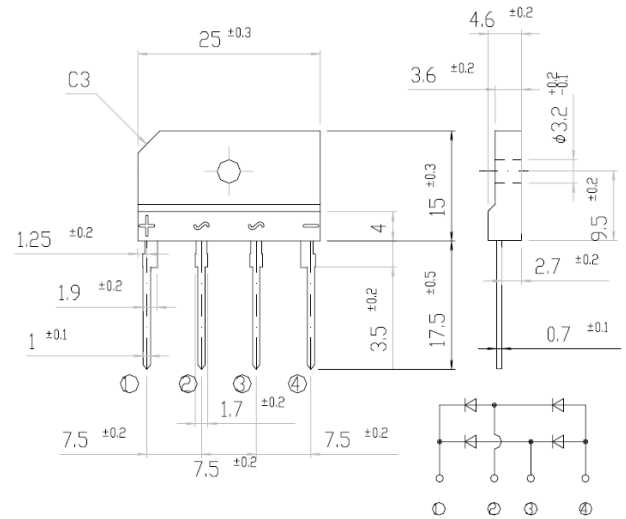
Features

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

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

GSIB-3S



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	G8XB 05	G8XB 10	G8XB 20	G8XB 40	G8XB 60	G8XB 80	G8XB 100	units
Maximum repetitive peak reverse voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{dc}	50	100	200	400	600	800	1000	V
Maximum average forward Rectified output current at T _c = 100°C (Note 1)	I _{f(av)}	8.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	150							A
Maximum instantaneous forward voltage drop per leg at 4.0A	V _f	1.0							V
Rating for fusing (t < 8.3ms)	I ² t	120							A ² Sec
Maximum DC reverse current at rated DC blocking voltage per leg	I _r	10.0 200							μA
Maximum thermal resistance per leg	(Note2) R _{th(ja)}	22.0							°C/W
	(Note1) R _{th(jc)}	4.2							
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES G8XB05 THRU G8XB100

Fig. 1 – Derating Curve Output Rectified Current

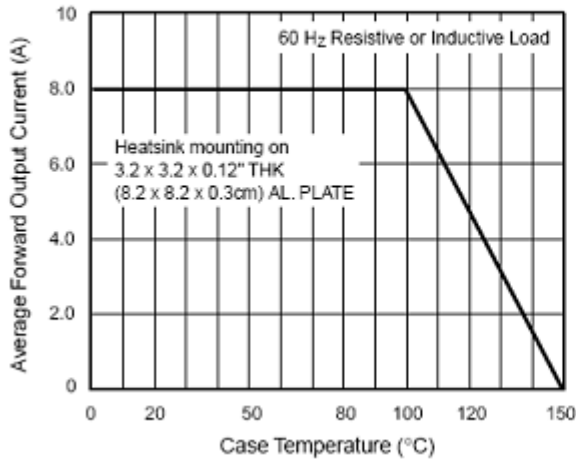


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

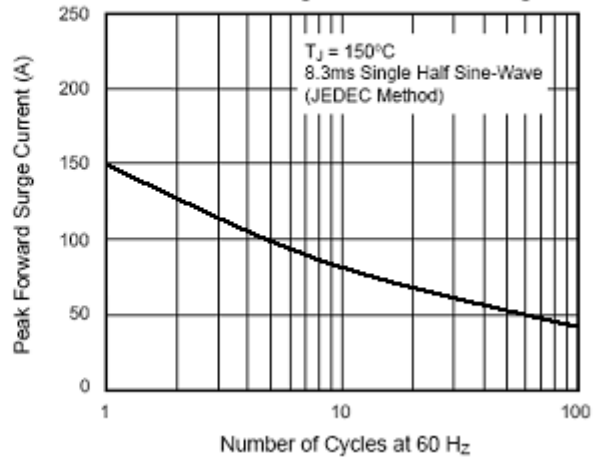


Fig. 3 – Typical Forward Characteristics Per Leg

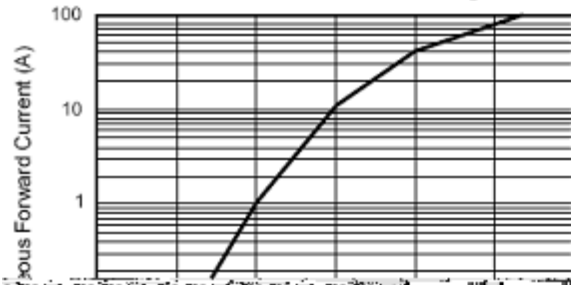


Fig. 4 – Typical Reverse Characteristics Per Leg

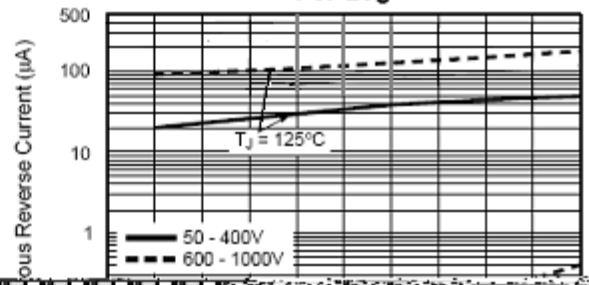


Fig. 5 – Typical Junction Capacitance Per Leg

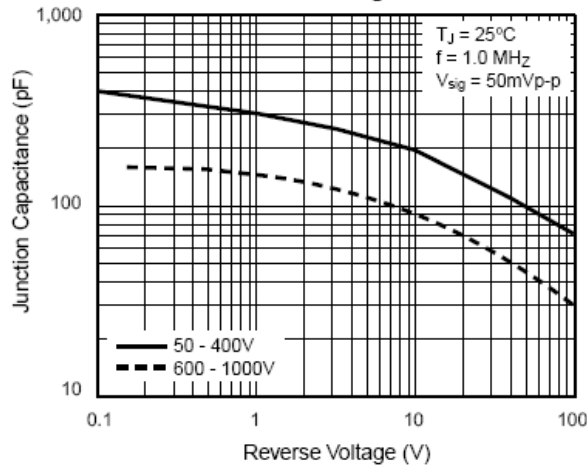


Fig. 6 – Typical Transient Thermal Impedance Per Leg

