

Glass Passivated Single-In-Line Bridge Rectifier

Reverse Voltage 200 and 800 V
Forward Current 4.0 A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 VRMS
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability

Mechanical Data

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed:
 260°C/10 seconds, 0.375 (9.5mm) lead length,
 5lbs. (2.3kg) tension

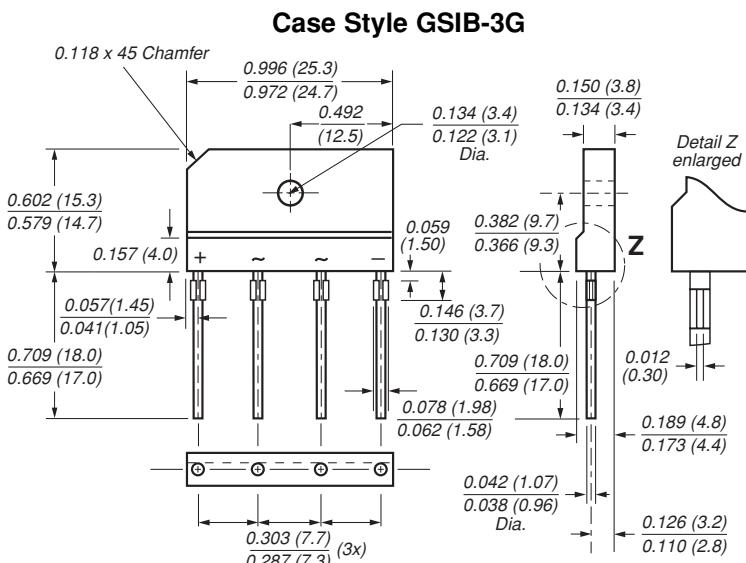
Mounting Position: Any⁽³⁾

Mounting Torque: 5 in-lbs max.

Weight: 0.15oz., 4.0g

Packaging codes-options:

1-400 ea. per Bulk Tray Stack



Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GSIB4A20	GSIB4A40	GSIB4A60	GSIB4A80	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	V
Maximum average forward rectified output current at T _C = 100°C ⁽¹⁾ T _A = 25°C ⁽²⁾	I _{F(AV)}			4.0 ⁽¹⁾ 2.3 ⁽²⁾		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}			80		A
Rating for fusing (t < 8.3ms)	I ² t			32		A ² sec
Typical thermal resistance per leg	R _{θJA} R _{θJC}			26 ⁽²⁾ 5 ⁽¹⁾		°C/W
Operating junction storage and temperature range	T _J , T _{TSG}			-55 to +150		°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GSIB4A20	GSIB4A40	GSIB4A60	GSIB4A80	Unit
Maximum instantaneous forward voltage drop per leg at 2.0 A	V _F		1.00			V
Maximum DC reverse current at rated DC blocking voltage per leg T _A = 25°C T _A = 125°C	I _R			5.0 400		μA

Notes: (1) Unit case mounted on Al plate heatsink

(2) Units 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

GSIB4A20 thru GSIB4A80



Vishay Semiconductors
formerly General Semiconductor

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 - Derating Curve Output Rectified Current

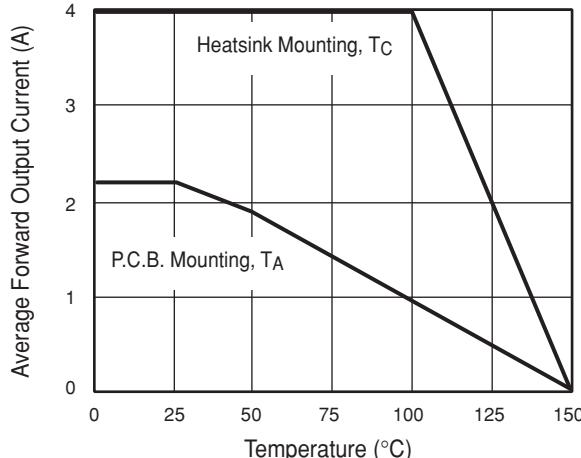


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

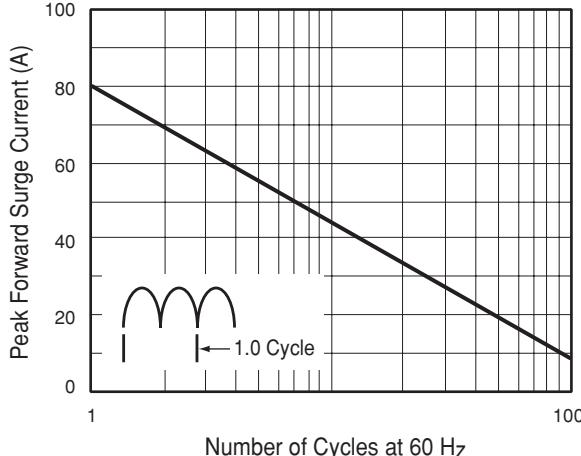


Fig. 3 - Typical Forward Characteristics Per Leg

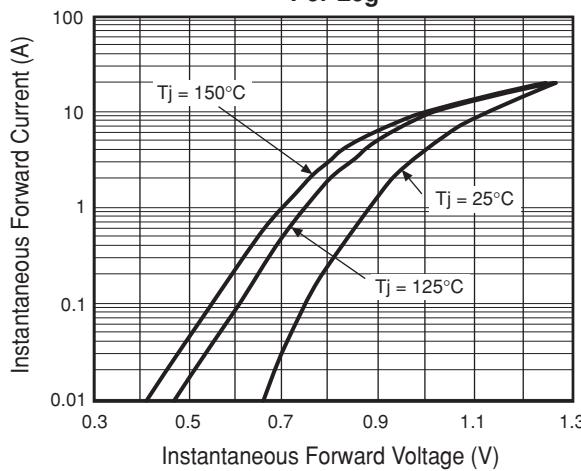


Fig. 4 - Typical Reverse Characteristics Per Leg

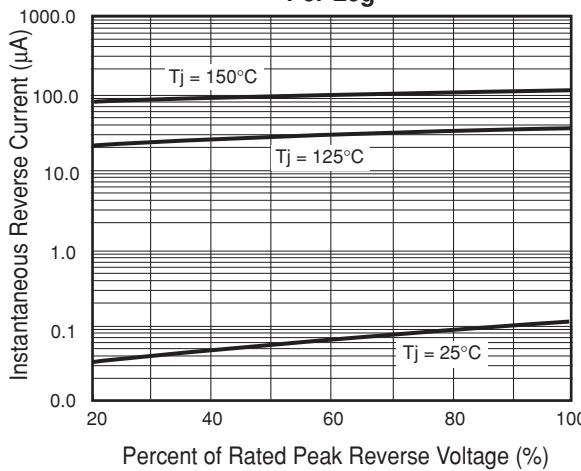


Fig. 5 - Typical Junction Capacitance Per Leg

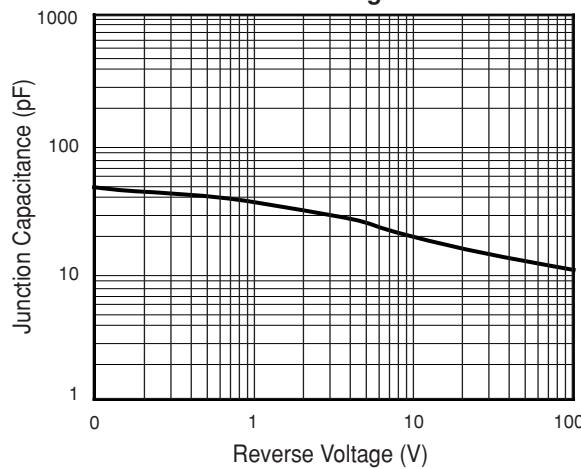


Fig. 6 - Typical Transient Thermal Impedance Per Leg

