

## 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

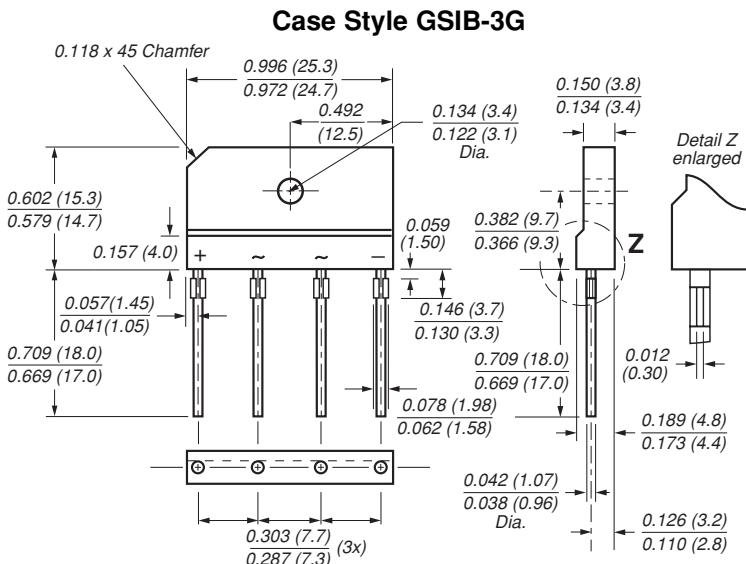
**Mounting Position:** Any<sup>(3)</sup>

**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 <sub>RRM</sub>	200	400	600	800	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	V
Maximum average forward rectified output current at T <sub>C</sub> = 100°C <sup>(1)</sup> T <sub>A</sub> = 25°C <sup>(2)</sup>	I <sub>F(AV)</sub>			4.0 <sup>(1)</sup> 2.3 <sup>(2)</sup>		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>			80		A
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t			32		A <sup>2</sup> sec
Typical thermal resistance per leg	R <sub>θJA</sub> R <sub>θJC</sub>			26 <sup>(2)</sup> 5 <sup>(1)</sup>		°C/W
Operating junction storage and temperature range	T <sub>J</sub> , T <sub>TSG</sub>			-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 <sub>F</sub>			1.00		V
Maximum DC reverse current at rated DC blocking voltage per leg T <sub>A</sub> = 25°C T <sub>A</sub> = 125°C	I <sub>R</sub>			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

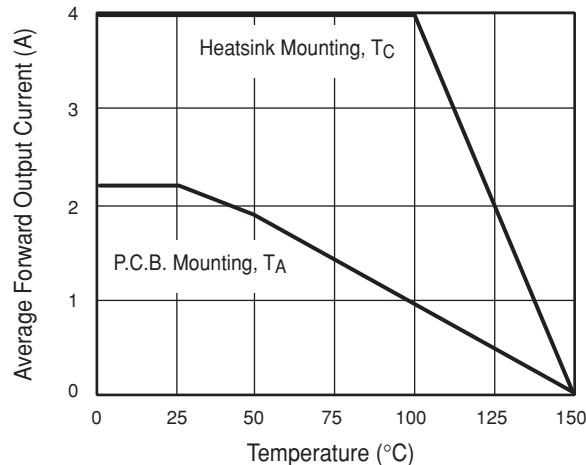
# GSIB4A20 thru GSIB4A80

Vishay Semiconductors  
formerly General Semiconductor

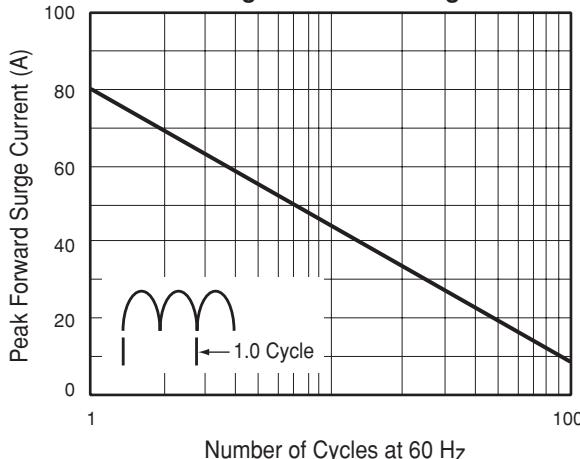


## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

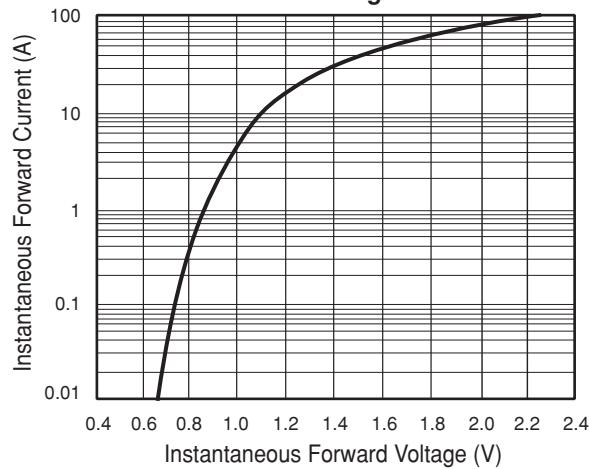
**Fig. 1 - Derating Curve Output Rectified Current**



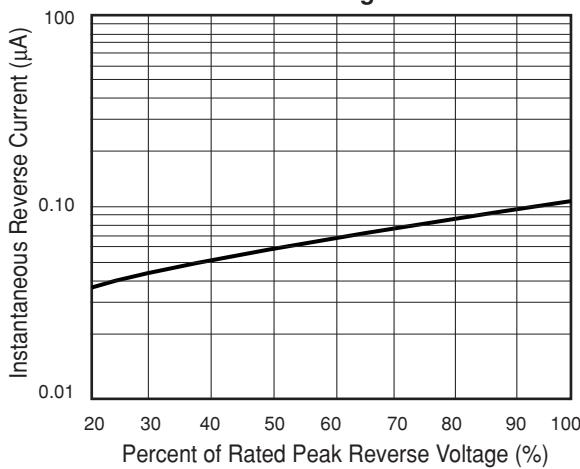
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



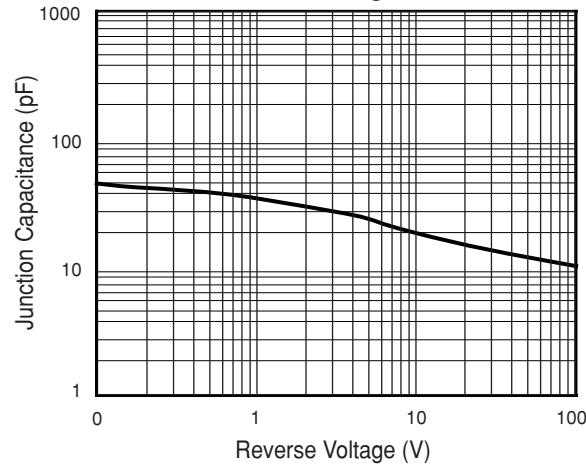
**Fig. 3 - Typical Forward Characteristics Per Leg**



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



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



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

