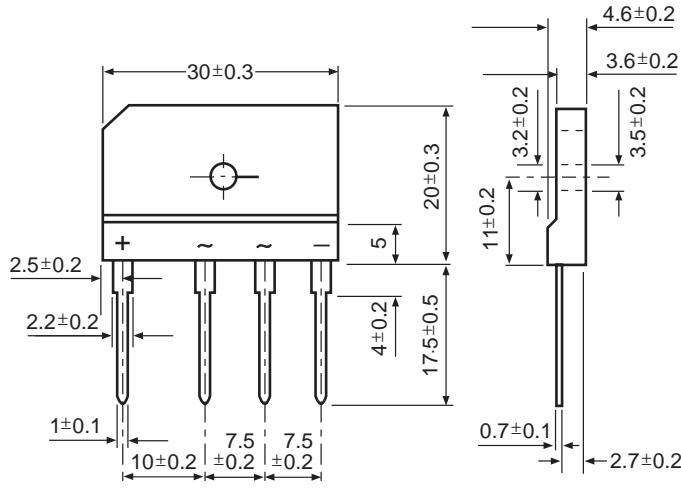

New Product

Glass Passivated Single-Phase Bridge Rectifier

Rectifier Reverse Voltage 200 and 800V
Rectifier Forward Current 6.0A

Case Style 5S



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: 5S Molded plastic body

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. - lb. max.

Weight: 0.26 ounce, 7.0 grams

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GSIB6A20	GSIB6A40	GSIB6A60	GSIB6A80	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 T _A = 25°C	I _{F(AV)}			6.0 ⁽¹⁾ 2.8 ⁽²⁾		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}			150		A
Rating for fusing (t < 8.3ms)	I ² t			93		A ² sec
Maximum thermal resistance per leg	R _{θJA} R _{θJC}			22 ⁽²⁾ 3.4 ⁽¹⁾		°C/W
Operating junction and storage temperature range	T _J , T _{TSG}			-55 to +150		°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GSIB6A20	GSIB6A40	GSIB6A60	GSIB6A80	Unit
Maximum instantaneous forward voltage drop per leg at 3.0A	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			10 250		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

Glass Passivated Single-Phase Bridge Rectifier

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

Fig. 1 - Derating Curve Output Rectified Current

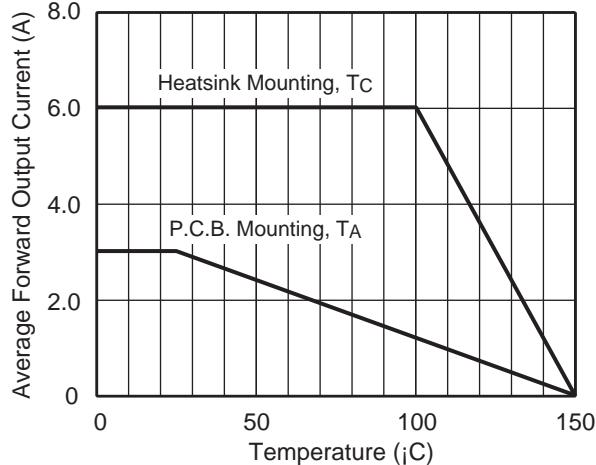


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

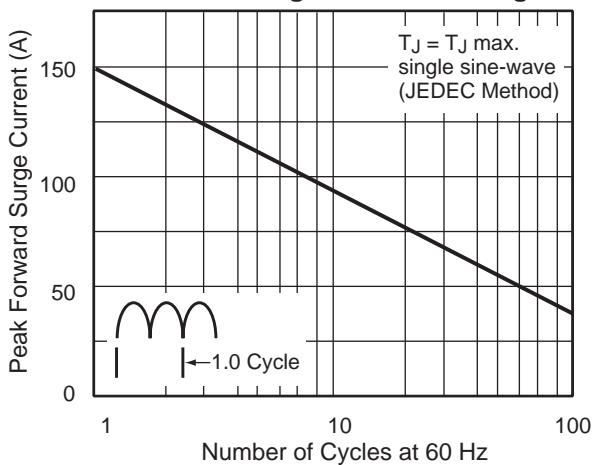


Fig. 3 - Typical Forward Characteristics Per Leg

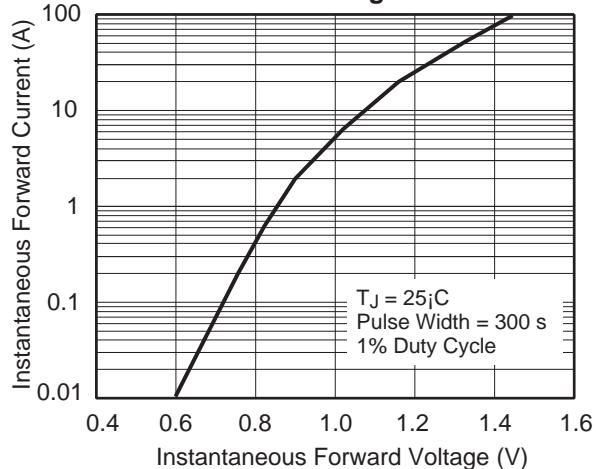


Fig. 4 - Typical Reverse Characteristics Per Leg

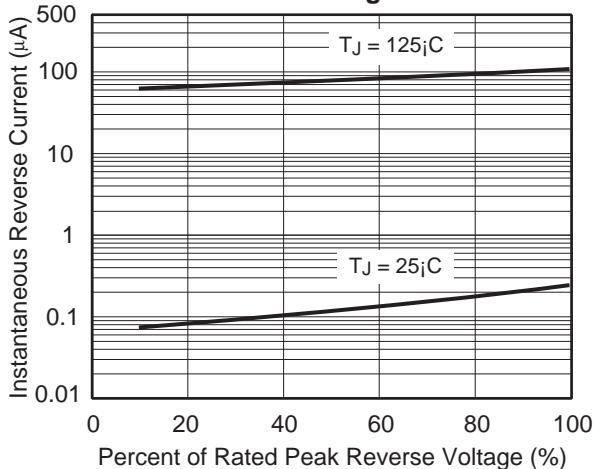


Fig. 5 - Typical Junction Capacitance Per Leg

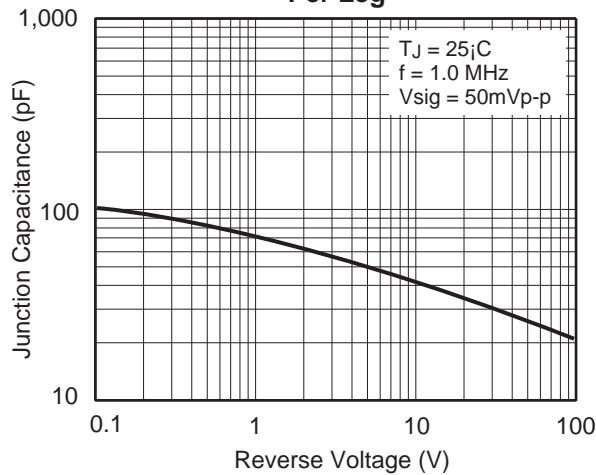


Fig. 6 - Typical Transient Thermal Impedance

