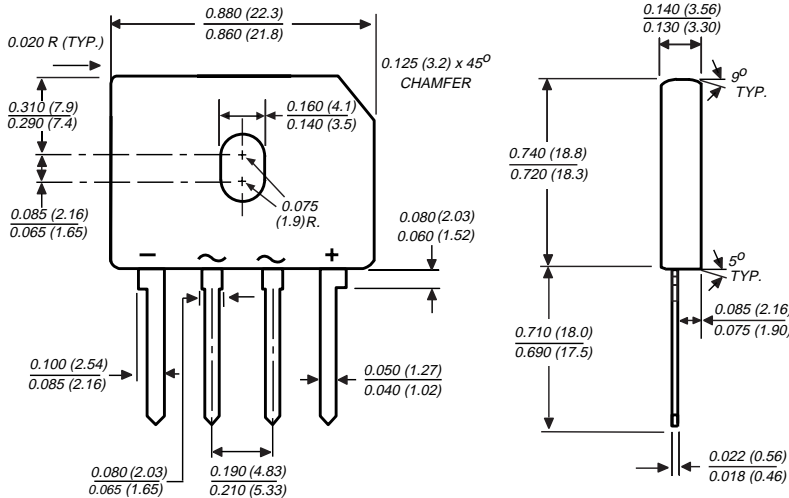


Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 200 and 800 V
Forward Current 4.0 A

Case Type GBU



Polarity shown on front side of case, positive lead by beveled corner
Lead forming option with 10mm-7.5mm spacing is available.
Dimensions in inches and (millimeters)

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: 0.15 oz., 4.0 g

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	G3SBA20	G3SBA60	G3SBA80	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	200	600	800	V
Maximum RMS voltage	V _{RMS}	140	420	560	V
Maximum DC blocking voltage	V _{DC}	200	600	800	V
Maximum average forward rectified output current at	I _{F(AV)}		4.0 2.3		A
					T _C = 100°C ⁽¹⁾ T _A = 25°C ⁽²⁾
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		27		A ² sec
Typical thermal resistance per leg	R _{θJA} R _{θJC}		26 ⁽¹⁾ 5.0 ⁽²⁾		°C/W
Operating junction storage and temperature range	T _J , T _{STG}		-55 to +150		°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	G3SBA20	G3SBA60	G3SBA80	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	I _R		5.0 400		μA
					T _A = 25°C T _A = 125°C

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

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

Fig. 1 - Derating Curve Output Rectified Current

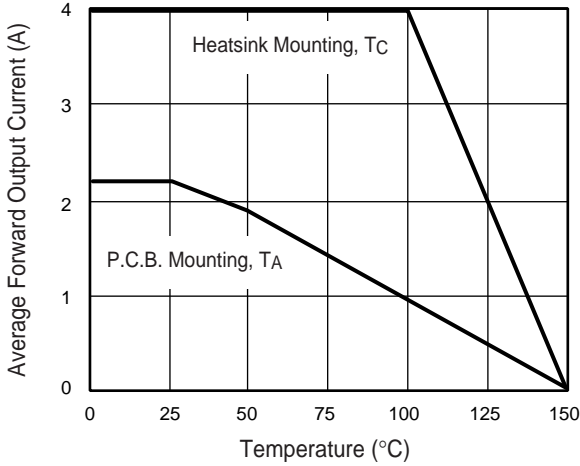


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

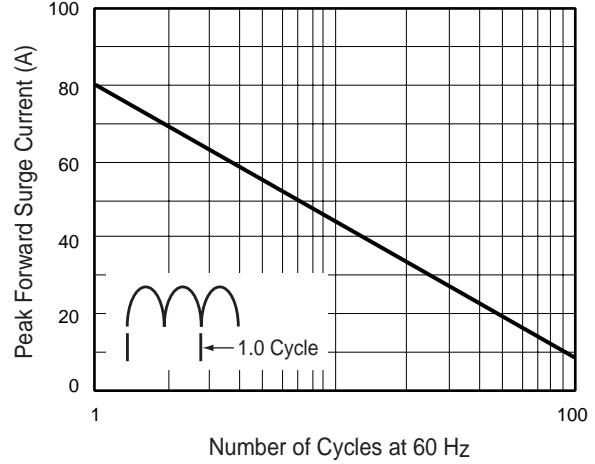


Fig. 3 - Typical Forward Characteristics Per Leg

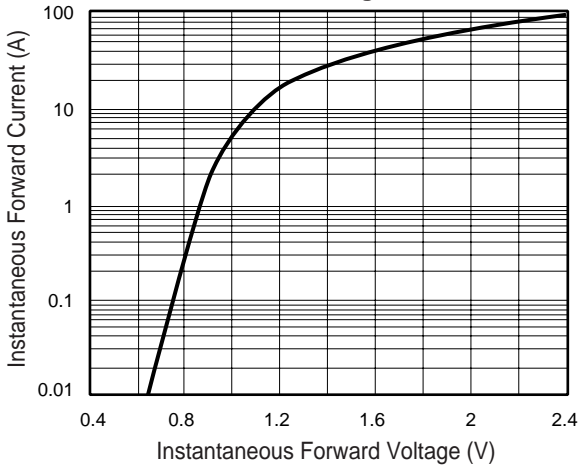


Fig. 4 - Typical Reverse Characteristics Per Leg

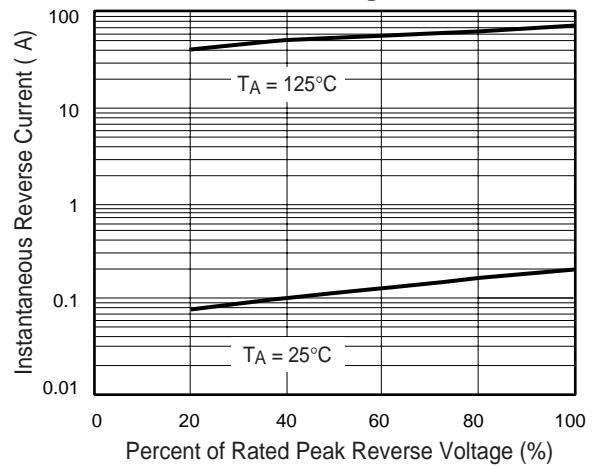


Fig. 5 - Typical Junction Capacitance Per Leg

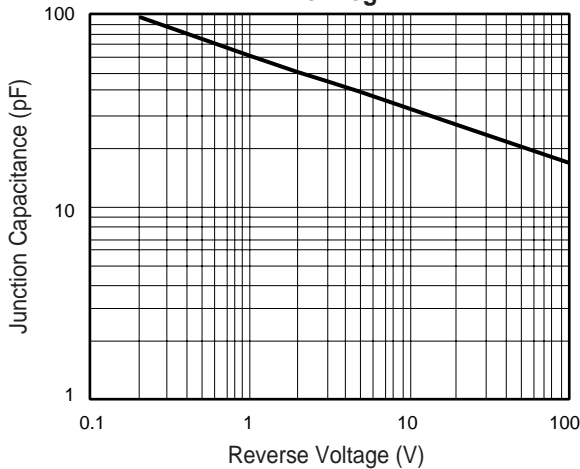


Fig. 6 - Typical Transient Thermal Impedance

