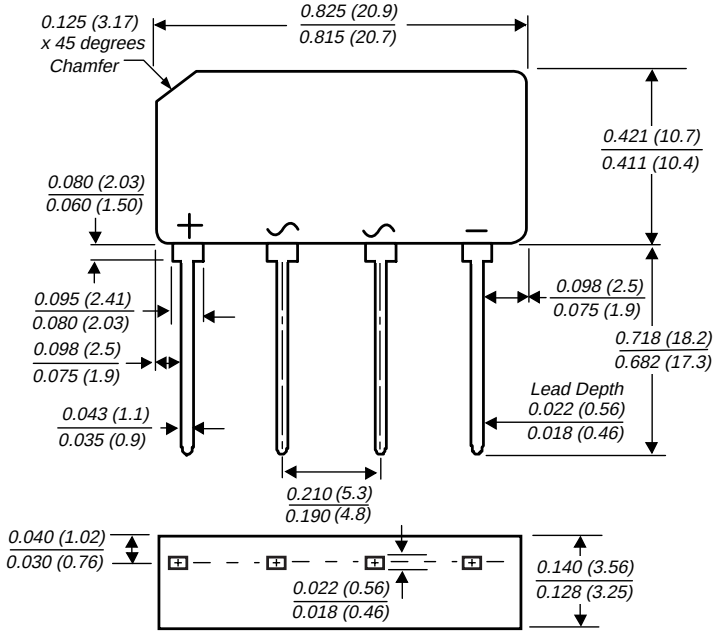
New Product

Vishay Semiconductors
formerly General Semiconductor

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 200 to 800V
Forward Current 1.5A

Case Type GBL



Polarity shown on front side of case, positive lead beveled corner.

Dimensions in inches and (millimeters)

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- High case dielectric strength
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic body over passivated junctions

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

Mounting Position: Any

Weight: 0.071 oz., 2.0 g

Packaging codes/options:
1/400 EA. per Bulk Tray Stack, 4K/box

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	G2SB20	G2SB60	G2SB80	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 T_A = 25°C	$I_{F(AV)}$	1.5			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^2t	27			A^2sec
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JL}$	40 12			°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	G2SB20	G2SB60	G2SB80	Unit
Maximum instantaneous forward voltage drop per leg at 0.75 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	5.0 300			µA

Note: (1) Unit mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Fig. 1 - Derating Curve Output Rectified Current

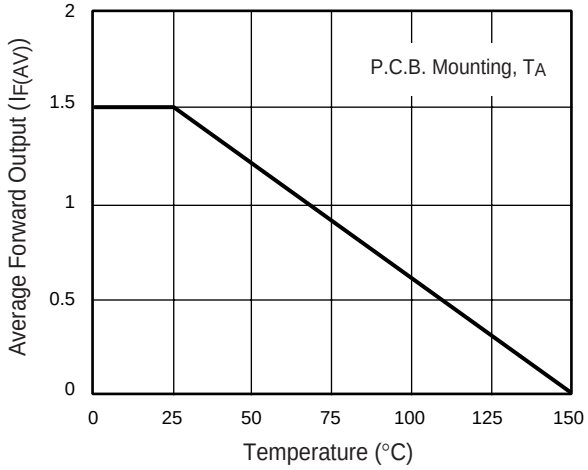


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

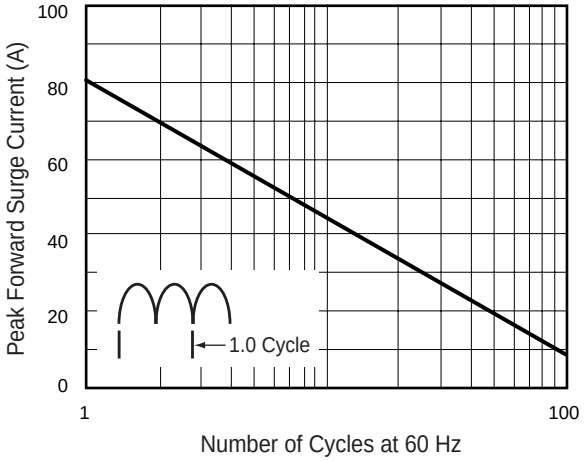


Fig. 3 - Typical Forward Characteristics Per Leg

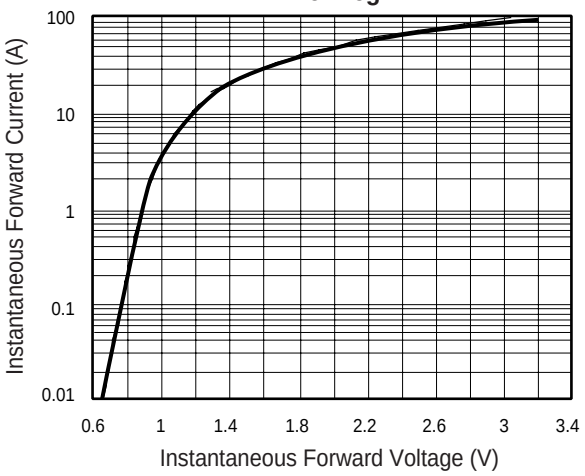


Fig. 4 - Typical Reverse Characteristics Per Leg

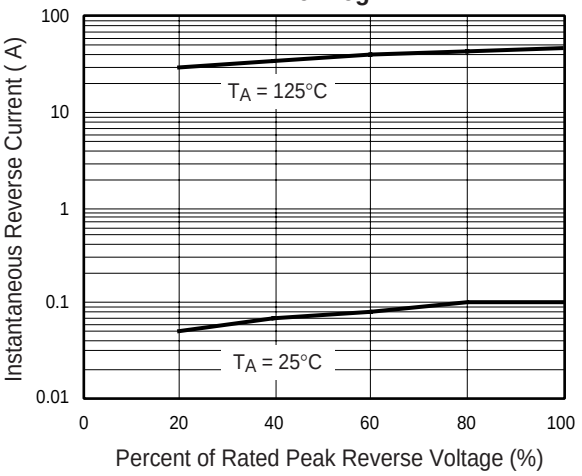


Fig. 5 - Typical Junction Capacitance Per Leg

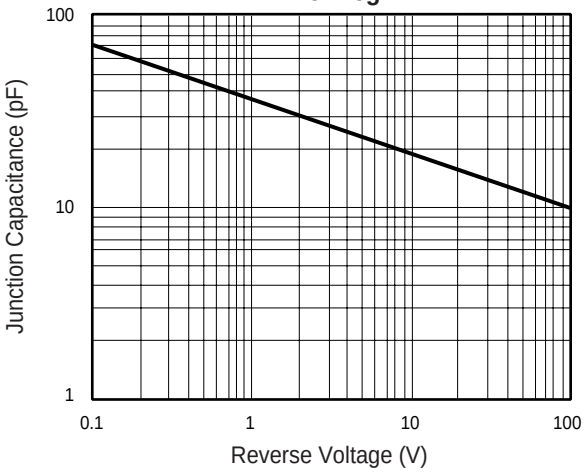


Fig. 6 - Typical Transient Thermal Impedance