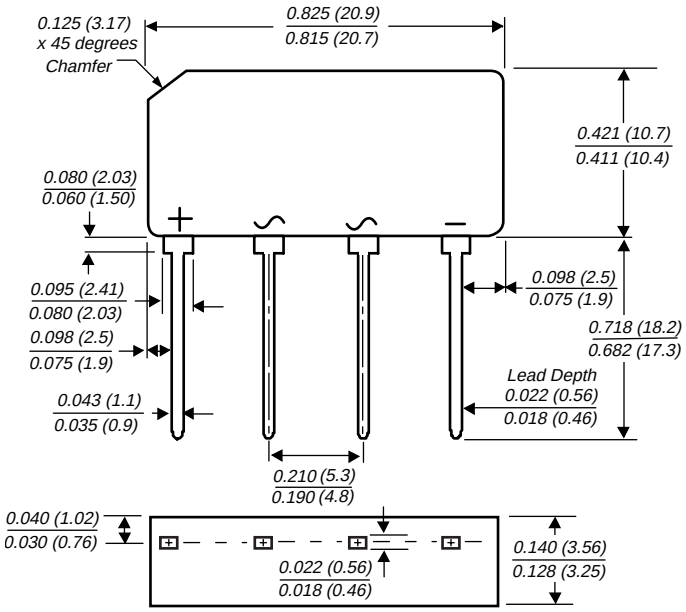
New Product

Vishay Semiconductors
formerly General Semiconductor

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 200 thru 800 V
Forward Current 1.5 A

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
- 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

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	G2SBA20	G2SBA60	G2SBA80	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}	60			A
Rating for fusing (t<8.3ms)	I^2t	15			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	G2SBA20	G2SBA60	G2SBA80	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

Notes:
(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

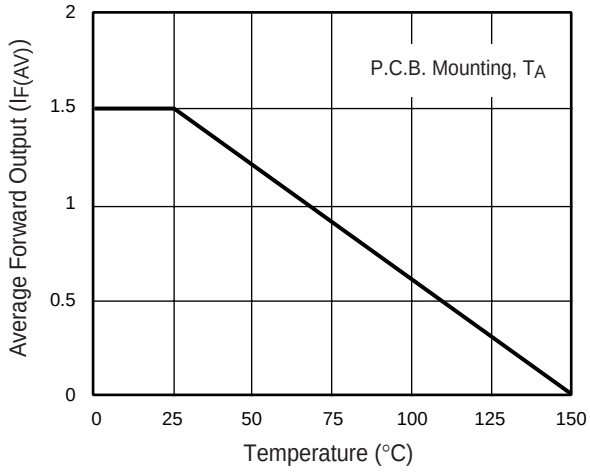


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

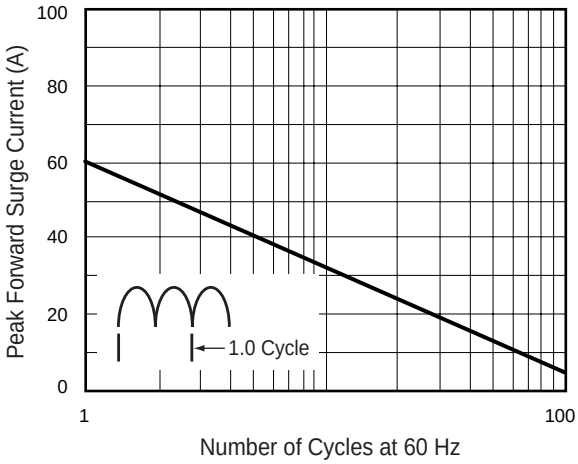


Fig. 3 - Typical Forward Characteristics Per Leg

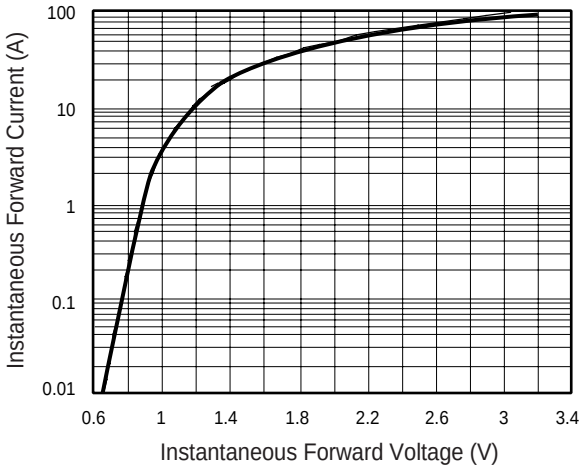


Fig. 4 - Typical Reverse Characteristics Per Leg

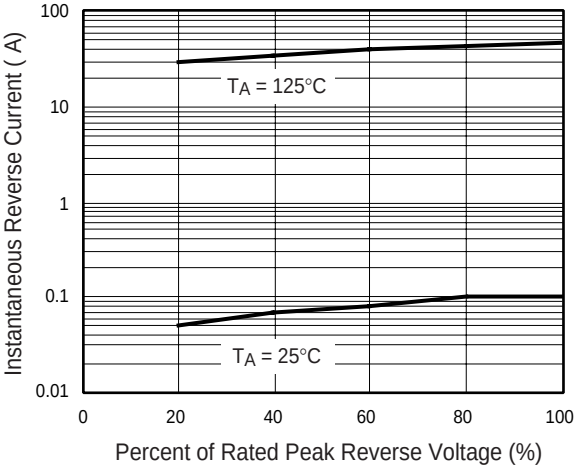


Fig. 5 - Typical Junction Capacitance Per Leg

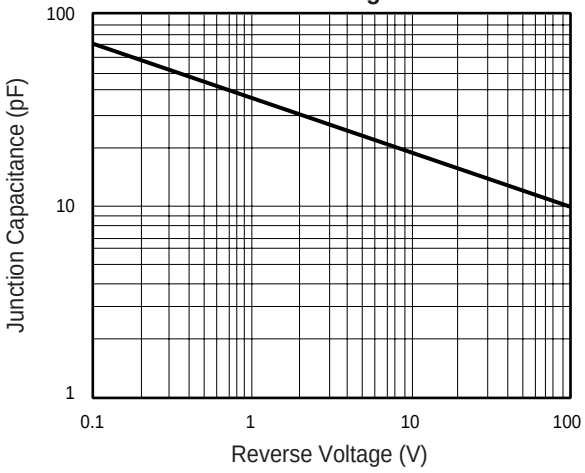


Fig. 6 - Typical Transient Thermal Impedance