



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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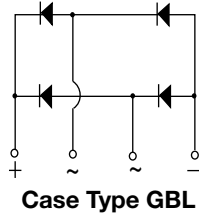
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Glass Passivated Single-Phase Bridge Rectifier



FEATURES

- UL recognition file number E54214
- Ideal for printed circuit boards
- High surge current capability
- Typical I_R less than 0.1 μA
- High case dielectric strength
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, SMPS, adapter, audio equipment, and home appliances application.

MECHANICAL DATA

Case: GBL

Molding compound meets UL 94 V-0 flammability rating
Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: As marked on body

PRIMARY CHARACTERISTICS	
Package	GBL
$I_{F(AV)}$	1.5 A
V_{RRM}	200 V, 600 V, 800 V
I_{FSM}	80 A
I_R	5 μA
V_F at $I_F = 0.75$ V	1.0 V
T_J max.	150 °C
Diode variations	In-Line

MAXIMUM RATINGS ($T_A = 25$ °C unless otherwise noted)					
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	I_{FSM}	80			A
Rating for fusing ($t < 8.3$ ms)	I^2t	27			A ² s
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150			°C

ELECTRICAL CHARACTERISTICS ($T_A = 25$ °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS	SYMBOL	G2SB20	G2SB60	G2SB80	UNIT
Maximum instantaneous forward voltage drop per diode	0.75 A	V_F	1.00			V
Maximum DC reverse current at rated DC blocking voltage per diode	$T_A = 25$ °C	I_R	5.0			μA
	$T_A = 125$ °C		300			



THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	G2SB20	G2SB60	G2SB80	UNIT
Typical thermal resistance	$R_{\theta JA}$	40			$^\circ\text{C/W}$
	$R_{\theta JC}$	12			

Note

- Unit mounted on PCB with 0.5" x 0.5" (12 mm x 12 mm) copper pads and 0.375" (9.5 mm) lead length

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
G2SB60-E3/45	2.045	45	20	Tube
G2SB60-E3/51	2.045	51	400	Anti-static PVC tray

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

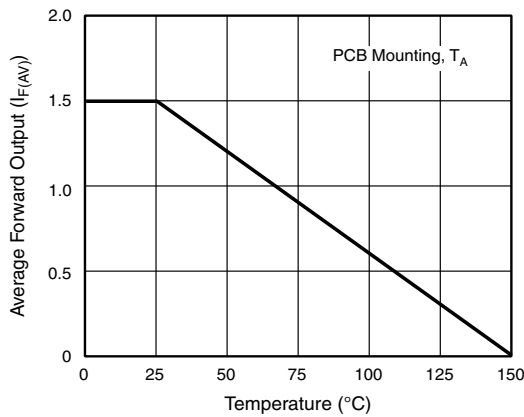


Fig. 1 - Derating Curve Output Rectified Current

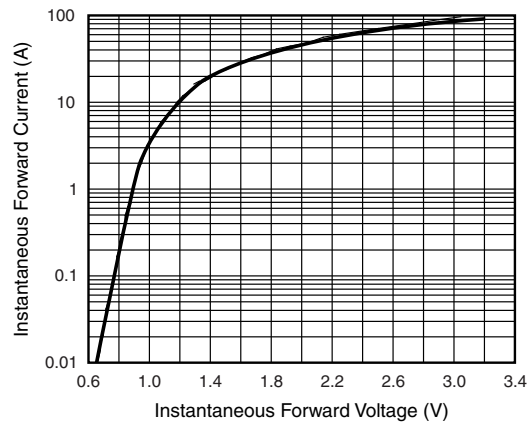


Fig. 3 - Typical Forward Characteristics Per Diode

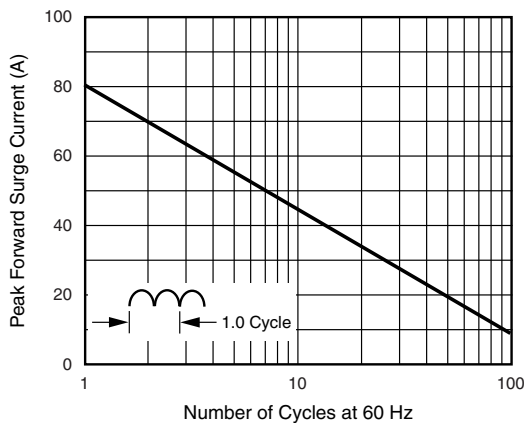


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

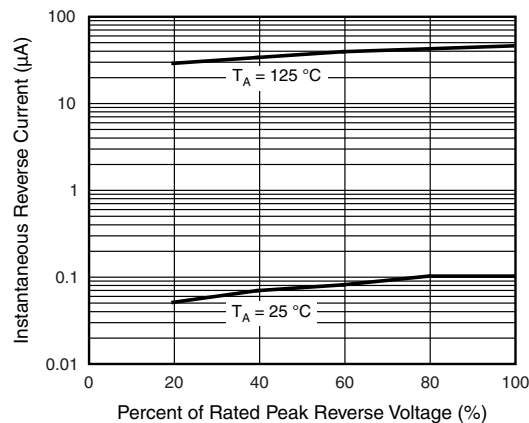


Fig. 4 - Typical Reverse Characteristics Per Diode

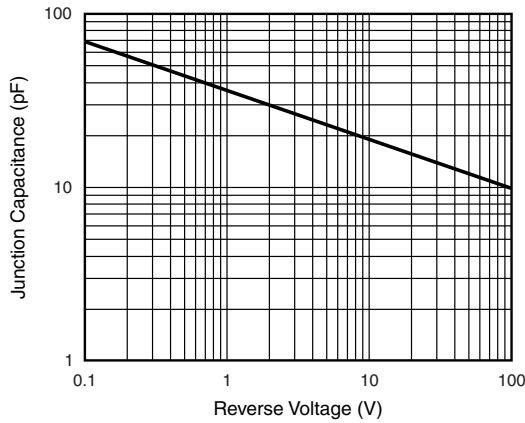


Fig. 5 - Typical Junction Capacitance Per Diode

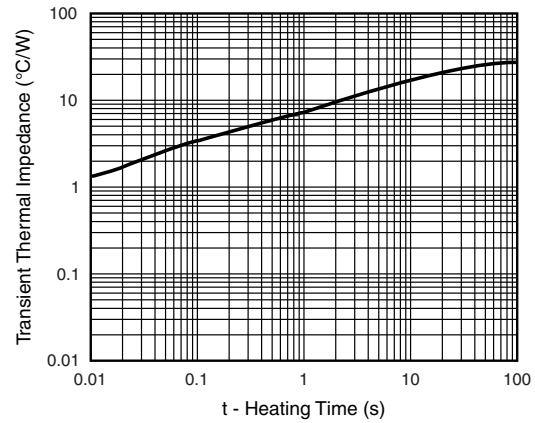
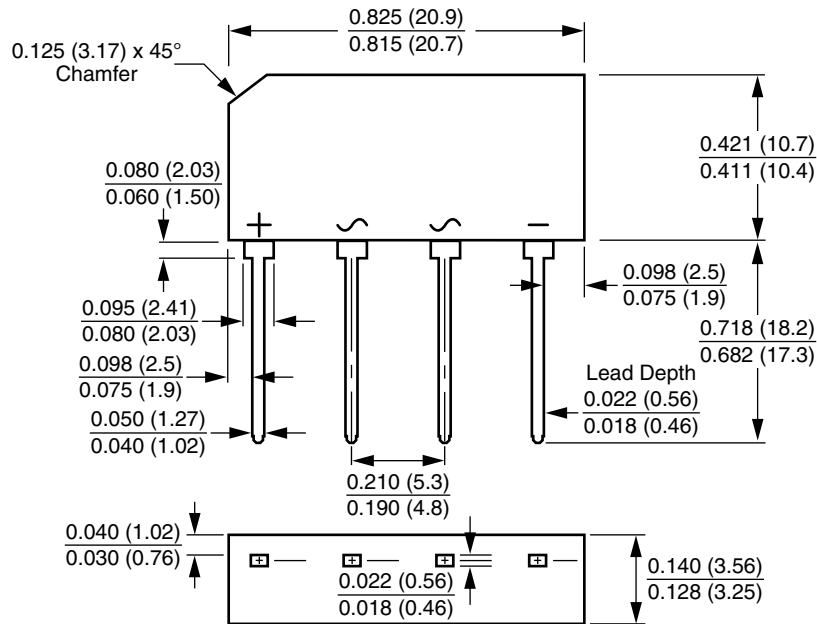


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

Case Type GBL



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



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