

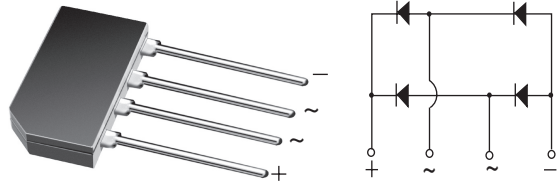


## Glass Passivated Single-Phase Bridge Rectifier

### Major Ratings and Characteristics

$I_{F(AV)}$	1.5 A
$V_{RRM}$	200 V, 600 V, 800 V
$I_{FSM}$	60 A
$I_R$	5 $\mu$ A
$V_F$	1.0 V
$T_j$ max.	150 °C

Case Type G B L



### Features

- UL Recognition file number E54214
- Ideal for printed circuit boards
- High surge current capability
- Typical  $I_R$  less than 0.1  $\mu$ A
- High case dielectric strength
- Meets MSL level 1, per J-STD-020C

### Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for Monitor, TV, Printer, SMPS, Adapter, Audio equipment, and Home Appliances applications

### Mechanical Data

**Case:** GBL

Epoxy meets UL-94V-0 Flammability rating

**Terminals:** Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and MIL-STD-750, Method 2026

**Polarity:** As marked on body

### Maximum Ratings

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	$I_{FSM}$	60			A
Rating for fusing ( $t < 8.3$ ms)	$I^2t$	15			A <sup>2</sup> sec
Operating junction and storage temperature range	$T_J, T_{STG}$	- 55 to + 150			°C

## Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Test condition	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	$T_A = 25\text{ °C}$	$I_R$	5.0			$\mu\text{A}$
	$T_A = 125\text{ °C}$		300			

## Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	G2SBA20	G2SBA60	G2SBA80	Unit
Typical thermal resistance per leg	$R_{\theta JA}$	40			$^{\circ}\text{C/W}$
	$R_{\theta JC}$	12			

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

## Ratings and Characteristics Curves

( $T_A = 25\text{ °C}$  unless otherwise noted)

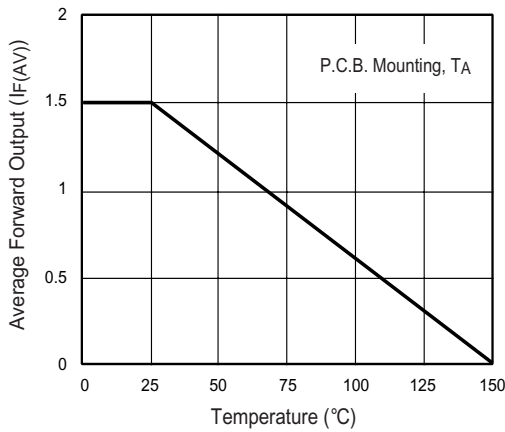


Figure 1. Derating Curve Output Rectified Current

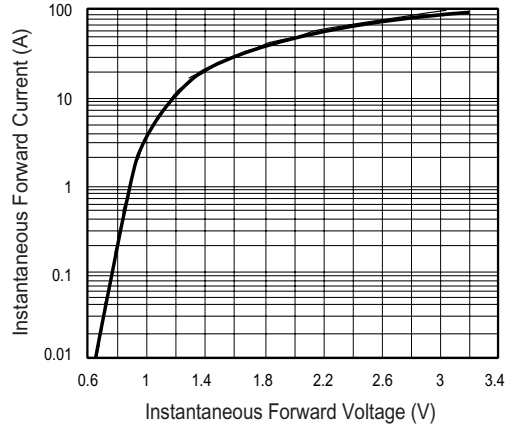


Figure 3. Typical Forward Characteristics Per Leg

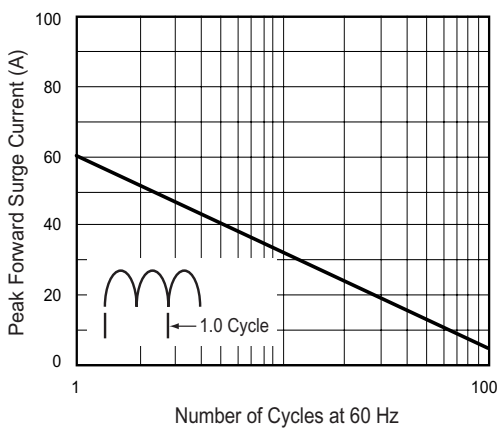


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

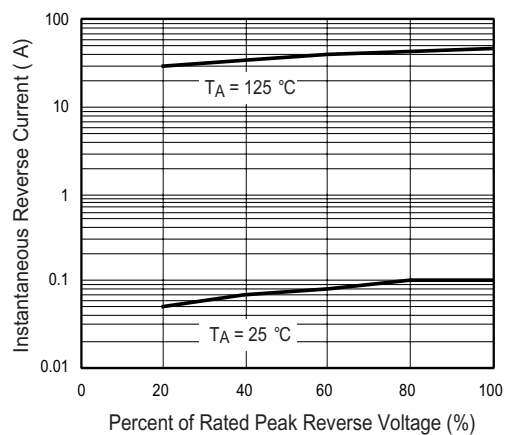


Figure 4. Typical Reverse Characteristics Per Leg

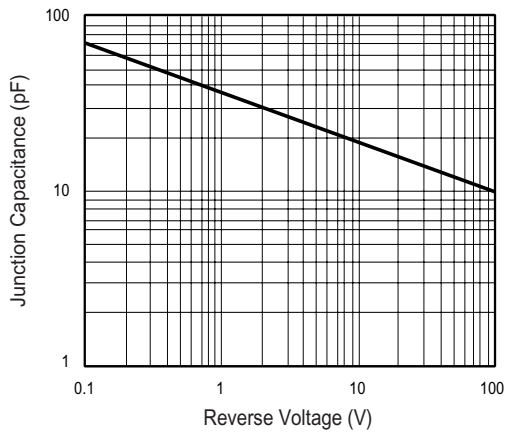


Figure 5. Typical Junction Capacitance Per Leg

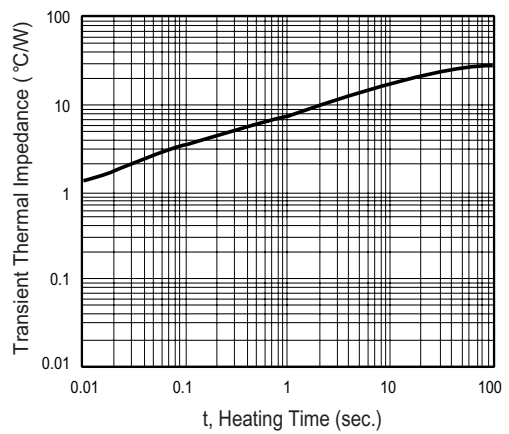
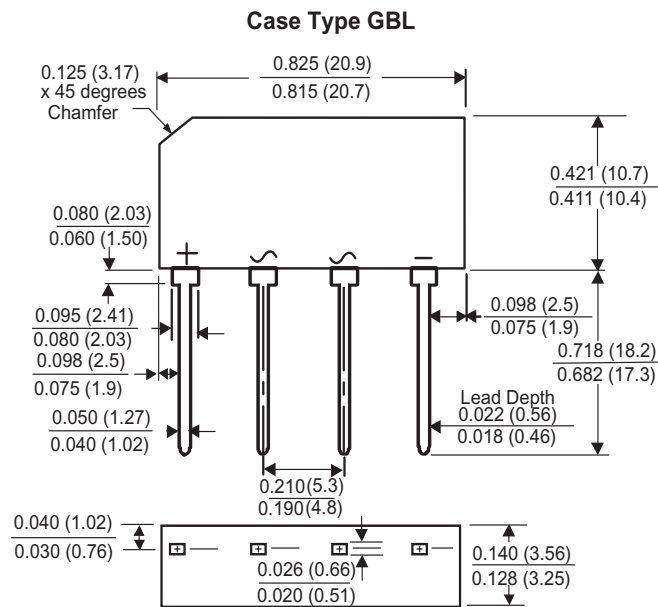


Figure 6. Typical Transient Thermal Impedance

## Package outline dimensions in Inches and (Millimeters)



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