



## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

**G2SBA20 THRU G2SBA100**

**VOLTAGE RANGE**                      **200 to 1000 Volts**

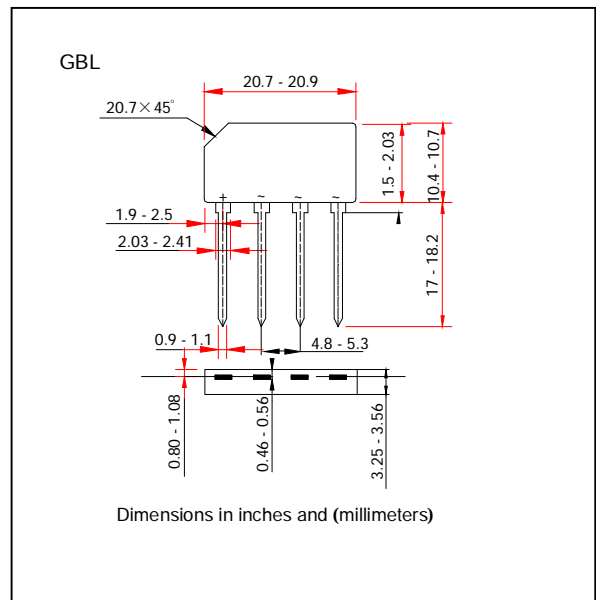
**CURRENT**                                      **1.5 Amperes**

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High case dielectric strength
- Typical  $I_r$  less than 0.1 A
- High surge current capability
- Ideal for printed circuit boards
- 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
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any
- Weight: 0.071 oz, 2.0g



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	G2SBA20	G2SBA60	G2SBA80	G2BA100	UNIT
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	200	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	140	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	600	800	1000	Volts
Maximum Average Forward Rectified Output Current At $T_C=80^\circ\text{C}$ (Note 1) $T_A=25^\circ\text{C}$	$I_{(AV)}$	2.0 1.5				Amps
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60				Amps
Maximum Instantaneous Forward drop Per leg At 0.75 Amperes	$V_F$	1.00				Volts
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	$I_R$ 5.0 300				$\mu\text{A}$
	$T_A=125^\circ\text{C}$					
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	15				$\text{A}^2\text{s}$
Typical Thermal Resistance Per Leg	$R_{\theta JA}$	40 12				$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$					
Operating Junction Storage and Temperature Range	$T_J, T_{STG}$	-55 to +150				$^\circ\text{C}$

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



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## RATINGS AND CHARACTERISTIC CURVES G2SBA20 THRU G2SBA100

FIG. 1- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

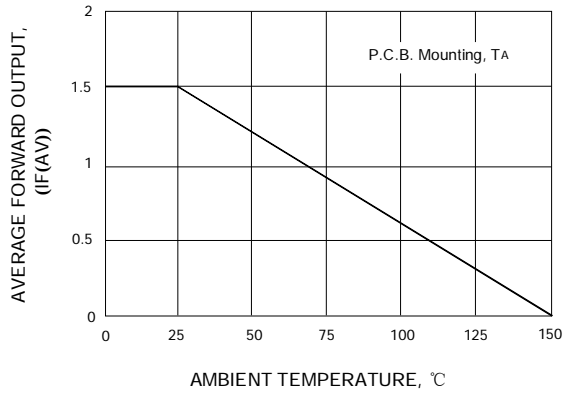


FIG. 2- MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER LEG

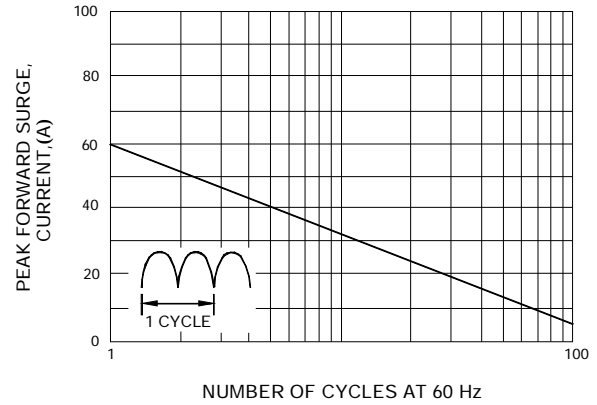


FIG. 3- TYPICAL FORWARD CHARACTERISTICS  
PER LEG

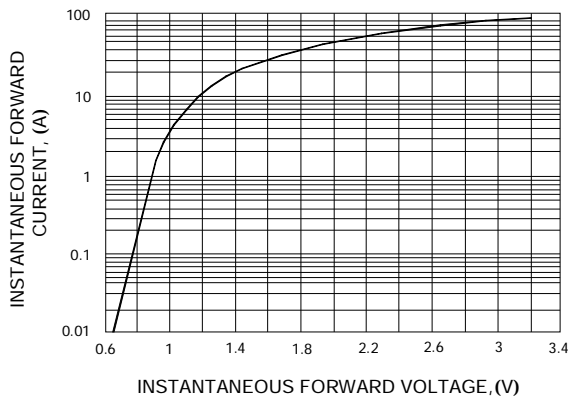


FIG. 4- TYPICAL REVERSE CHARACTERISTICS  
PER LEG

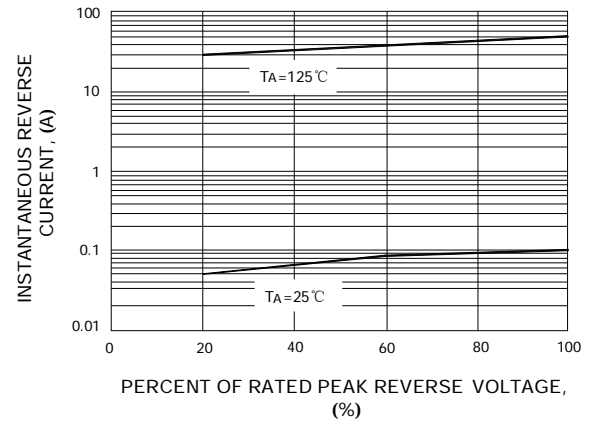


FIG. 5- TYPICAL JUNCTION CAPACITANCE  
PER LEG

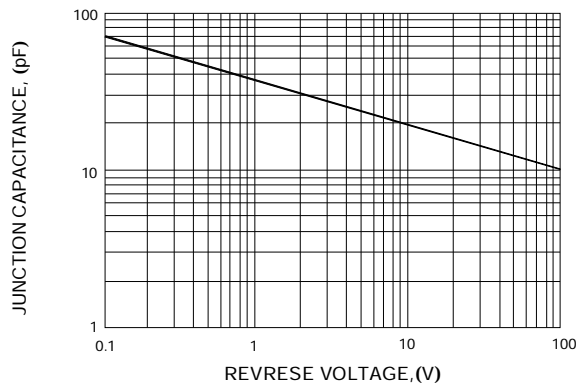


FIG. 6- TYPICAL TRANSIENT THERMAL  
IMPEDANCE

