



## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### G2SB20 THRU G2SB100

VOLTAGE RANGE

200 to 1000 Volts

CURRENT

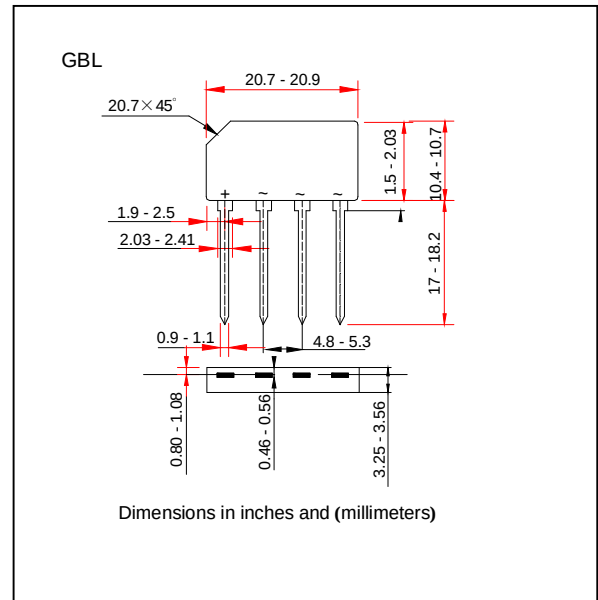
1.5 Amperes

### 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                          | G2SB20      | G2SB60 | G2SB80 | G2B100 | UNIT             |
|-----------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------|-------------|--------|--------|--------|------------------|
| Maximum Reverse Peak Repetitive Voltage                                                                   |                       | V <sub>RRM</sub>                 | 200         | 600    | 800    | 1000   | Volts            |
| Maximum RMS Voltage                                                                                       |                       | V <sub>RMS</sub>                 | 140         | 420    | 560    | 700    | Volts            |
| Maximum DC Blocking Voltage                                                                               |                       | V <sub>DC</sub>                  | 200         | 600    | 800    | 1000   | Volts            |
| Maximum Average Forward Rectified Output Current At T <sub>C</sub> =80°C (Note 1)<br>T <sub>A</sub> =25°C |                       | I <sub>(AV)</sub>                | 2.0<br>1.5  |        |        |        | Amps             |
| Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC Method)                     |                       | I <sub>FSM</sub>                 | 80          |        |        |        | Amps             |
| Maximum Instantaneous Forward drop Per leg At 0.75 Amperes                                                |                       | V <sub>F</sub>                   | 1.00        |        |        |        | Volts            |
| Maximum Reverse Current at rated DC blocking voltage per element                                          | T <sub>A</sub> =25°C  | I <sub>R</sub>                   | 5.0         |        |        |        | μ A              |
|                                                                                                           | T <sub>A</sub> =125°C |                                  | 300         |        |        |        |                  |
| Rating for Fusing (t<8.3ms)                                                                               |                       | I <sup>2</sup> t                 | 27          |        |        |        | A <sup>2</sup> s |
| Typical Thermal Resistance Per Leg                                                                        |                       | R <sub>θJA</sub>                 | 40          |        |        |        | °C/W             |
|                                                                                                           |                       | R <sub>θJC</sub>                 | 12          |        |        |        |                  |
| Operating Junction Storage and Temperature Range                                                          |                       | T <sub>J</sub> ,T <sub>STG</sub> | -55 to +150 |        |        |        | °C               |

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



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### RATINGS AND CHARACTERISTIC CURVES G2SB20 THRU G2SB100

FIG. 1- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

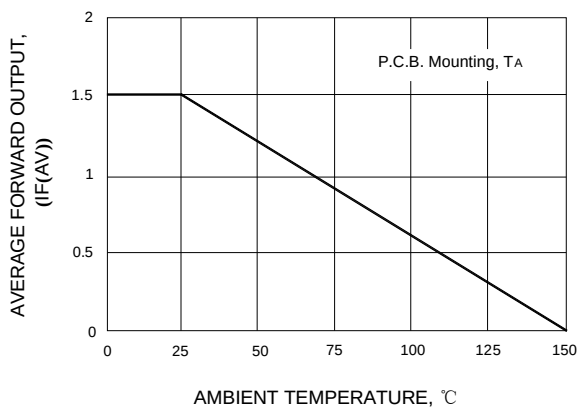


FIG. 2- MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER LEG

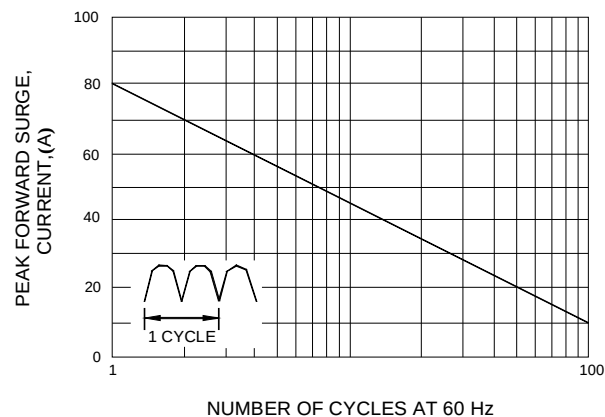


FIG. 3- TYPICAL FORWARD CHARACTERISTICS  
PER LEG

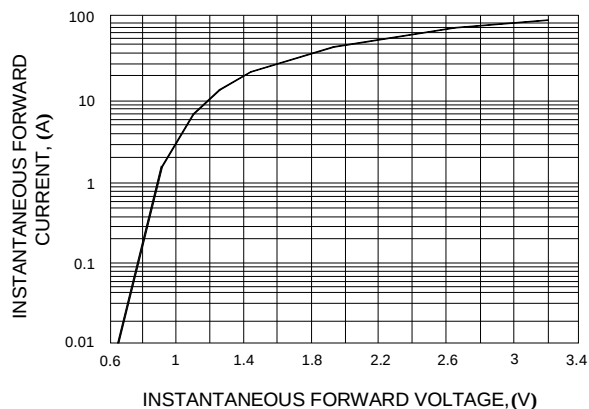


FIG. 4- TYPICAL REVERSE CHARACTERISTICS  
PER LEG

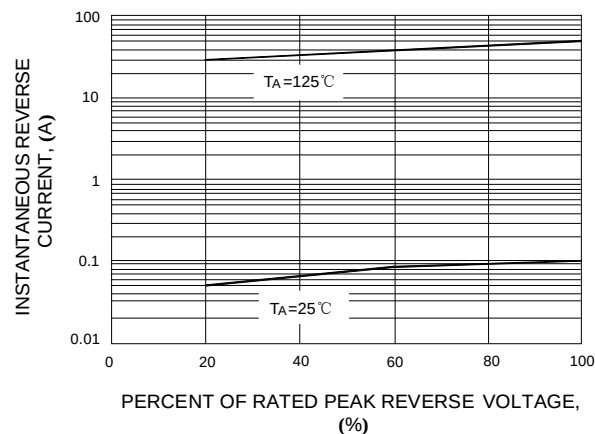


FIG. 5- TYPICAL JUNCTION CAPACITANCE  
PER LEG

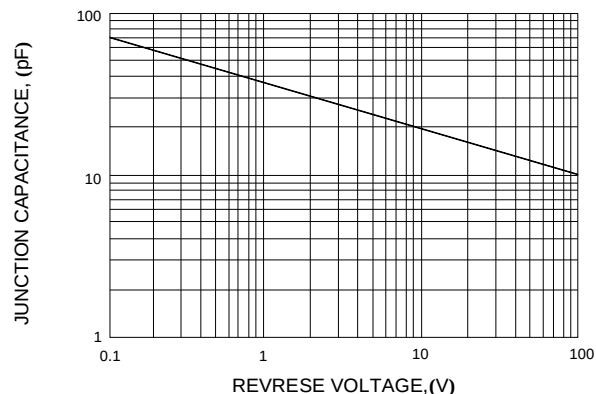


FIG. 6- TYPICAL TRANSIENT THERMAL  
IMPEDANCE

