## **G2SBA480-E**

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V Current:4.0A



### **Features**

Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Glass passivated chip junction

High case dielectric strength

Typical I<sub>R</sub> less than 0.1 µ A

High surge current capability

Ideal for printed circuit board

High temperature soldering guaranteed:

260  $^{\circ}\text{C}$  /10 seconds, 0.375"(9.5mm) lead length, 5lbs.(2.3kg) tension

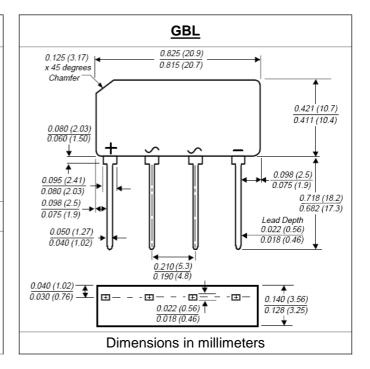
## **Mechanical Data**

Terminal: Plated leads solderable per MIL-STD 750, Method 2026

Case: Molded plastic body over passivated junctions

Polarity: Polarity symbol marked on body

Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	Symbol	G2SBA480-E	units
Maximum repetitive peak reverse voltage	Vrrm	800	V
Maximum RMS voltage	Vrms	560	V
Maximum DC blocking voltage	Vdc	800	V
Maximum average forward $Tc = 50^{\circ}C \text{ (Note 1)}$ rectified output current $Ta = 40^{\circ}C \text{ (Note 2)}$	If(av)	4.0 3.0	А
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	120	А
Maximum instantaneous forward voltage drop per leg at 2.0A	Vf	1.0	V
Rating for fusing (t < 8.3ms)	l²t	60	A <sup>2</sup> S
Maximum DC reverse current at $Ta = 25$ °C rated DC blocking voltage per leg $Ta = 125$ °C	Ir	5.0 500	μA
Maximum thermal resistance per leg	Rth(ja) Rth(jc)	47.0 10.0	℃/\
Operating junction and storage temperature range	Tj, Tstg	-55 to +150	°C

## Note:

- 1. Unit mounted on P.C.B. with  $3.0 \times 3.0 \times 0.11$ " thick (7.5 x 7.5 x 0.3 cm) Aluminum plate
- 2. Unit mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5"(12 x 12mm) copper pads
- 3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

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### **RATINGS AND CHARACTERISTIC CURVES G2SBA480-E**

Fig. 1 - Derating Curves Output **Rectified Current** 5.0 Average Forward Output Current (A) 60 Hz Resistive or Inductive Load Heat-Sink Mounting 4.0 3.0 x 3.0 x 0.11" Thick (7.5 x 7.5 x 0.3cm) 3.0 Aluminum Plate 2.0 P.C.B. Mounting 0.47 x 0.47" (12 x 12mm) 1.0 Copper pads with 0.375" (9.5mm) lead length 0 0 150 Ambient Temperature (°C)

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

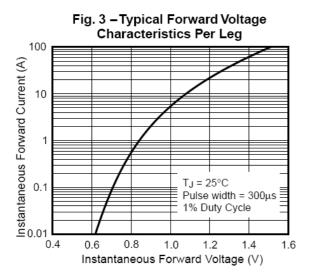
150

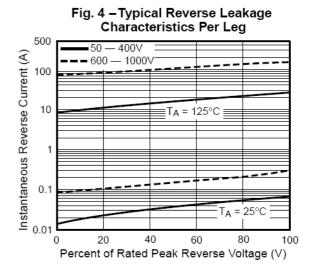
(Y)

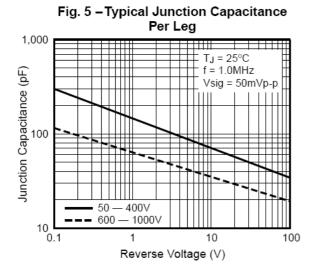
TJ = TJ max.
Single Sine-Wave
(JEDEC Method)

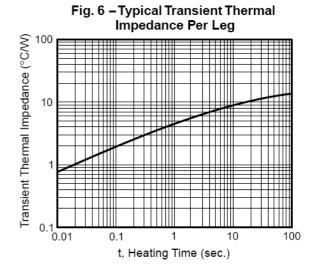
100

Number of Cycles at 60Hz









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