G2SB460-E THRU G2SB480-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V to 800V Current:4.0A



Features

Plastic package has Underwriters Laboratory

Flammability Classification 94V-0

Glass passivated chip junction

High case dielectric strength

Typical IR less than 0.1µA

High surge current capability

Ideal for printed circuit boards

High temperature soldering guaranteed:

260℃/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg)

tension

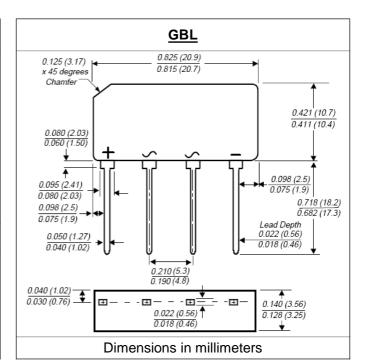
Halogen Free

Mechanical Data

Case: Molded plastic body over passivated junctions Terminals: Plated leads solderable per MIL-STD-750,

Method 2026

Mounting Position: Any Weight: 0.071 oz., 2.0 g



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%)

Maximum Recurrent Peak Reverse Voltage Maximum RMS Voltage Vrms 420 Maximum DC blocking Voltage Vdc 600 Maximum average forward rectified output current at Ta=40°C(Note1) Ta=40°C(Note2) Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load Maximum Instantaneous Forward Voltage at forward current 2.0A Rating for fusing (t<8.3ms) Maximum DC Reverse Current at rated DC blocking voltage Typical thermal resistance per leg Rth(ja)					
Maximum RMS Voltage Vrms 420 Maximum DC blocking Voltage Vdc 600 Maximum average forward rectified output current at Ta=40°C(Note2) If(av) 4.0 Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load Ifsm 150 Maximum Instantaneous Forward Voltage at forward current 2.0A Vf 1.0 Rating for fusing (t<8.3ms) I²t 93 Maximum DC Reverse Current at rated DC blocking voltage Ta =125°C Ta =125°C Ir 5.0 Typical thermal resistance per leg Rth(ja) 47		Symbol	G2SB460-E	G2SB480-E	units
Maximum DC blocking Voltage Vdc 600 Maximum average forward rectified output current at Ta=40°C(Note1) Ta=40°C(Note2) Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load Maximum Instantaneous Forward Voltage at forward current 2.0A Rating for fusing (t<8.3ms) Maximum DC Reverse Current Ta=25°C Ir Ta =125°C Typical thermal resistance per leg Rth(ja)	aximum Recurrent Peak Reverse Voltage	Vrrm	600	800	V
Maximum average forward rectified output current at rectified output current at Ta=40°C(Note2) If(av) 4.0 Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load Ifsm 150 Maximum Instantaneous Forward Voltage at forward current 2.0A Vf 1.0 Rating for fusing (t<8.3ms)	aximum RMS Voltage	Vrms	420	560	V
Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load Maximum Instantaneous Forward Voltage at forward current 2.0A Rating for fusing (t<8.3ms) Maximum DC Reverse Current Ta = 25°C at rated DC blocking voltage Typical thermal resistance per leg Tectof (Note2) If (av) 3.0 If (av) 3.0 If (av) 150 Vf 1.0 150 Typical thermal resistance per leg Rth(ja)	aximum DC blocking Voltage	Vdc	600	800	V
wave superimposed on rated load Maximum Instantaneous Forward Voltage at forward current 2.0A Rating for fusing (t<8.3ms) Maximum DC Reverse Current at rated DC blocking voltage Typical thermal resistance per leg			_		А
current 2.0A VI 1.0 Rating for fusing (t<8.3ms)		ne- Ifsm	150		А
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Typical thermal resistance per leg Rth(ja)		ard Vf	1.0		V
at rated DC blocking voltage Tra = 125 °C Tra = 125 °C Rth(ja) Rth(ja) 47	ating for fusing (t<8.3ms)	l ² t	93		A ² S
Typical thermal resistance per leg		- 1 11 1			μΑ
	/pical thermal resistance per leg	Rth(ja) Rth(jl)	47 10		℃/\
Storage and Operation Junction Temperature Tj, Tstg -55 to +150	torage and Operation Junction Temperature	Tj, Tstg	-55 to	+150	°C

Note:

- 1. Unit mounted on 3.0 x 3.0 x 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

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RATINGS AND CHARACTERISTIC CURVES G2SB460-E THRU G2SB480-E

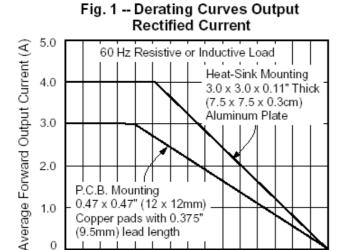


Fig. 3 -- Typical Forward Voltage Characteristics Per Leg

Ambient Temperature (°C)

100

150

50

0

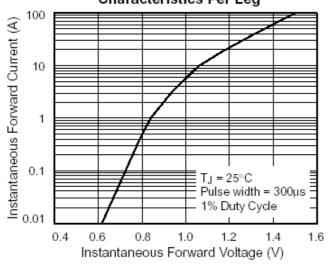


Fig. 5 -- Typical Junction Capacitance Per Leg

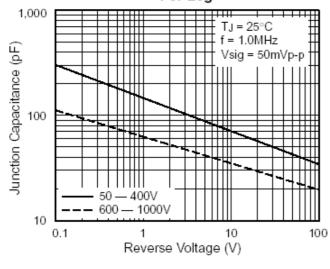


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

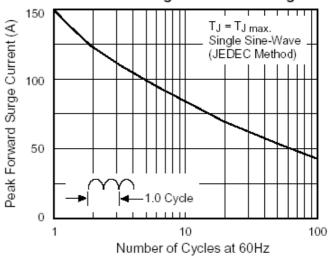


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

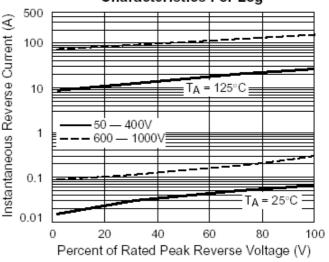
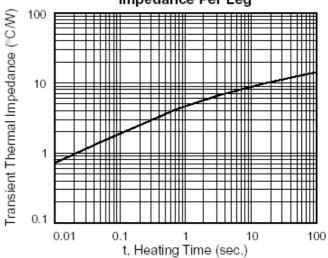


Fig. 6 -- Typical Transient Thermal Impedance Per Leg



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