

Single Phase Glass Passivated Silicon Bridge Rectifier

$$V_{RRM} = 50 \text{ V} - 400 \text{ V}$$

$$I_O = 8 \text{ A}$$

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge overload rating
- High temperature soldering guaranteed: 260°C/ 10 seconds, 0.375 (9.5mm) lead length
- Not ESD Sensitive

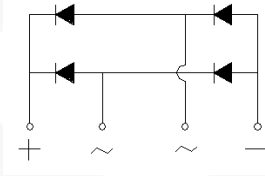
Mechanical Data

Case: Molded plastic body over passivated junctions

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

Mounting position: Any

GBU Package



Maximum ratings at T_c = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	GBU8A	GBU8B	GBU8D	GBU8G	Unit
Repetitive peak reverse voltage	V _{RRM}		50	100	200	400	V
RMS reverse voltage	V _{RMS}		35	70	140	280	V
DC blocking voltage	V _{DC}		50	100	200	400	V
Operating temperature	T _j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T _{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics at T_c = 25 °C, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load

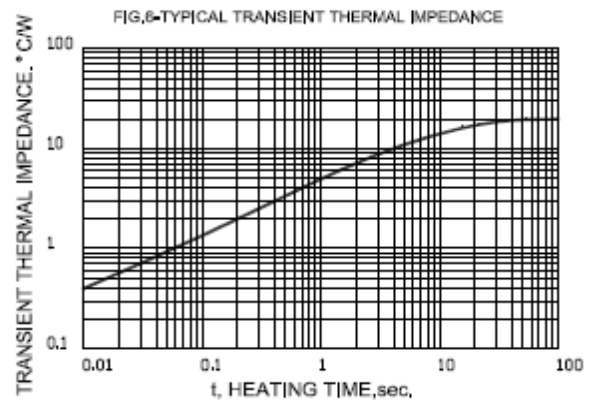
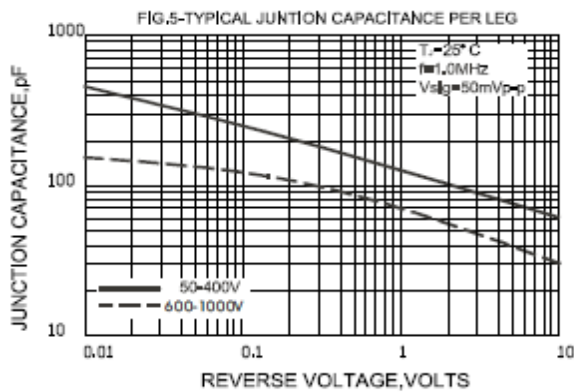
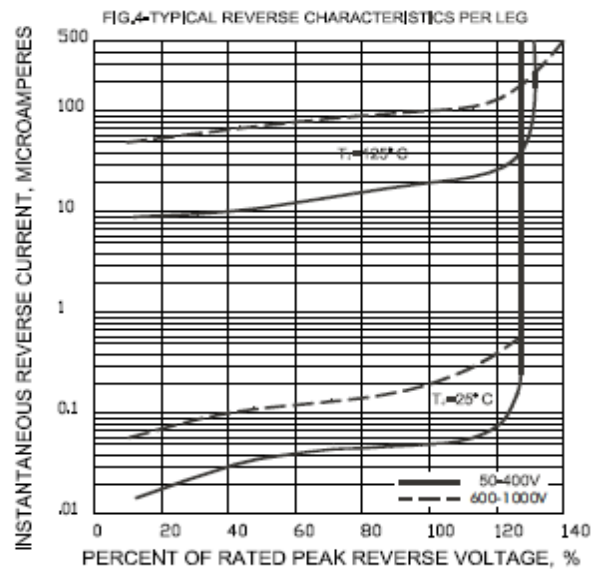
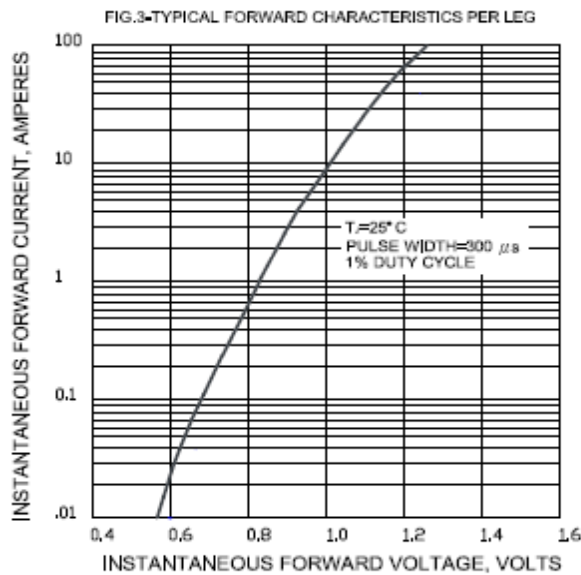
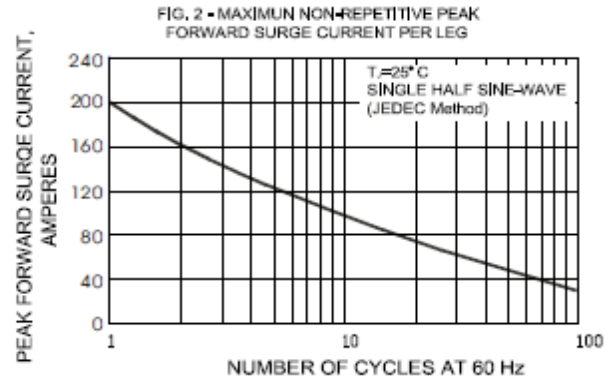
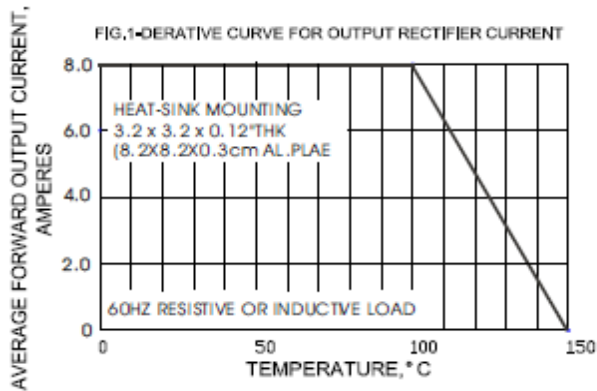
For capacitive load derate current by 20%

Parameter	Symbol	Conditions	GBU8A	GBU8B	GBU8D	GBU8G	Unit
Maximum average forward rectified current ^{1,2}	I _O	T _c = 100 °C	8.0	8.0	8.0	8.0	A
Peak forward surge current	I _{FSM}	t _p = 8.3 ms, half sine	200	200	200	200	A
Maximum instantaneous forward voltage drop per leg	V _F	I _F = 8 A	1.1	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	T _a = 25 °C T _a = 125 °C	5 500	5 500	5 500	5 500	μA
Rating for fusing	I ² t	t < 8.3 ms	166	166	166	166	A ² sec
Typical junction capacitance per leg ³	C _j		211	211	211	211	pF
Typical thermal resistance per leg ^{1,2}	R _{θJA}		21	21	21	21	°C/W
	R _{θJL}		2.2	2.2	2.2	2.2	

¹ - Device mounted on 82 mm x 82 mm x 3 mm Al plate heatsink

² - Recommended mounted position is to bolt down device on a heatsink with silicon thermal compound for maximum heat transfer using #6 screw.

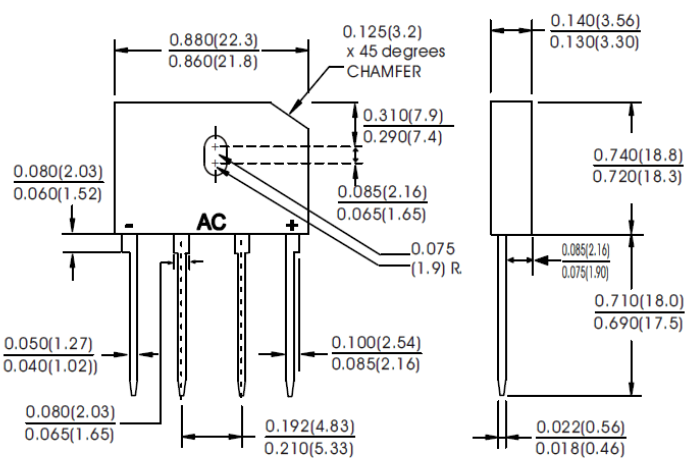
³ - Measured at 1.0 MHz and applied reverse bias of 4.0 V



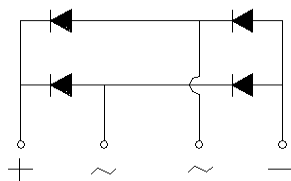
Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

GBU



Dimensions in inches and (millimeters)



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