

# Single Phase Glass Passivated Silicon Bridge Rectifier

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

$$I_O = 4 \text{ A}$$

## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized
- 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
- Not ESD Sensitive

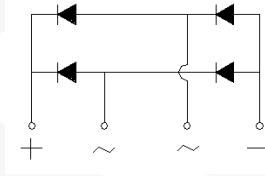
## Mechanical Data

Case: Molded plastic body over passivated junctions

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

Weight: 0.071 oz, 2.0 g

GBL Package



## Maximum ratings at $T_c = 25^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Conditions	GBL005	GBL01	GBL02	GBL04	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	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

## Electrical characteristics at $T_c = 25^\circ\text{C}$ , unless otherwise specified

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

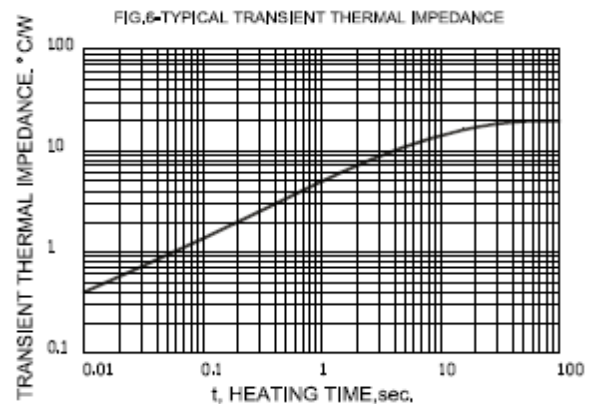
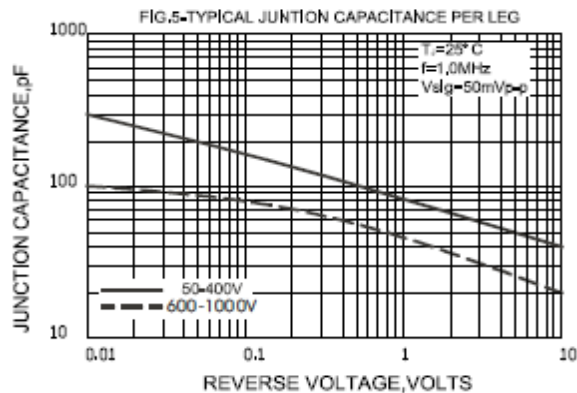
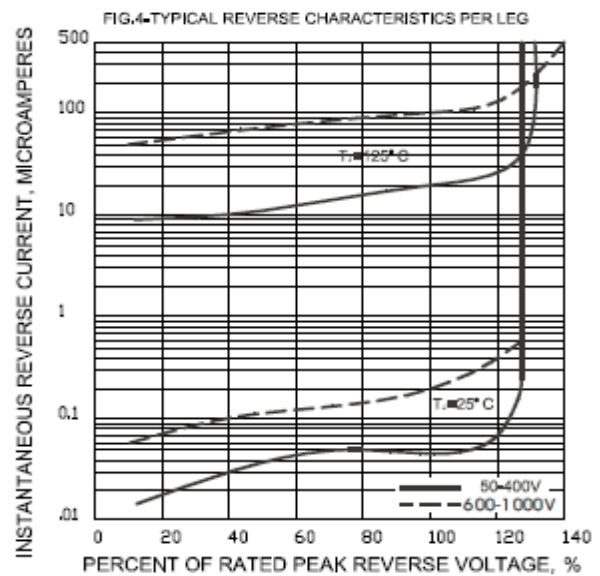
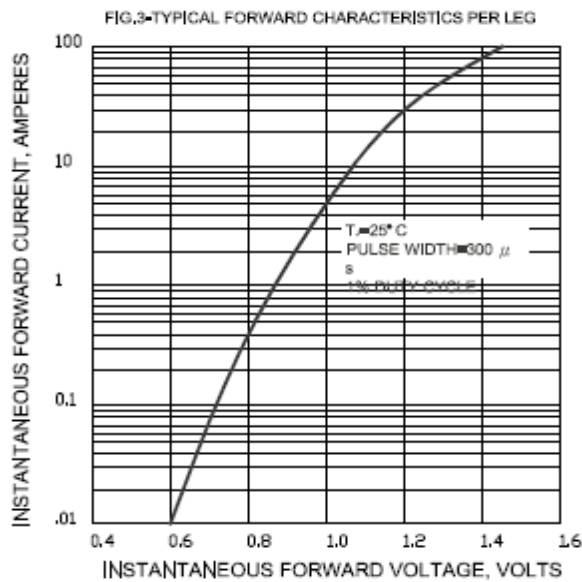
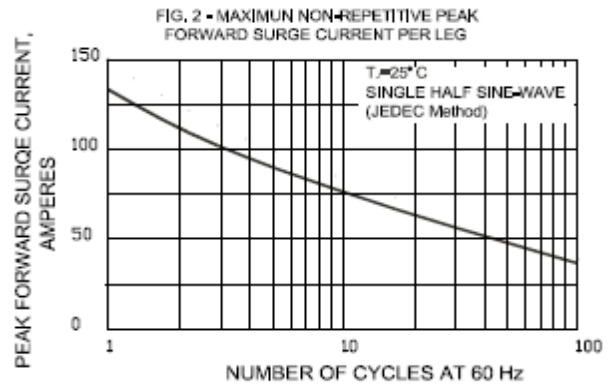
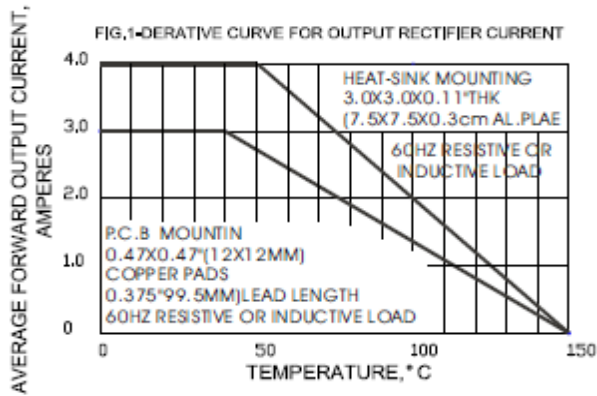
For capacitive load derate current by 20%

Parameter	Symbol	Conditions	GBL005	GBL01	GBL02	GBL04	Unit
Maximum average forward rectified current	$I_O$	$T_c = 50^\circ\text{C}$ (Note 1)	4.0	4.0	4.0	4.0	A
		$T_c = 40^\circ\text{C}$ (Note 2)	3.0	3.0	3.0	3.0	
Peak forward surge current	$I_{FSM}$	$t_p = 8.3 \text{ ms}$ , half sine	135	135	135	135	A
Maximum instantaneous forward voltage drop per leg	$V_F$	$I_F = 4 \text{ A}$	1.1	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	$I_R$	$T_a = 25^\circ\text{C}$	5	5	5	5	$\mu\text{A}$
		$T_a = 125^\circ\text{C}$	500	500	500	500	
Rating for fusing	$I^2t$	$t < 8.3 \text{ ms}$	75	75	75	75	$\text{A}^2\text{sec}$
Typical junction capacitance per leg (Note 3)	$C_j$		95	95	95	95	pF
Typical thermal resistance per leg	$R_{\theta JA}$	(Note 1)	22	22	22	22	$^\circ\text{C/W}$
	$R_{\theta JL}$	(Note 2)	3.5	3.5	3.5	3.5	

<sup>1</sup> - Unit mounted on 3.0" x 3.0" x 0.11" (75 mm x 75 mm x 3 mm) Al plate

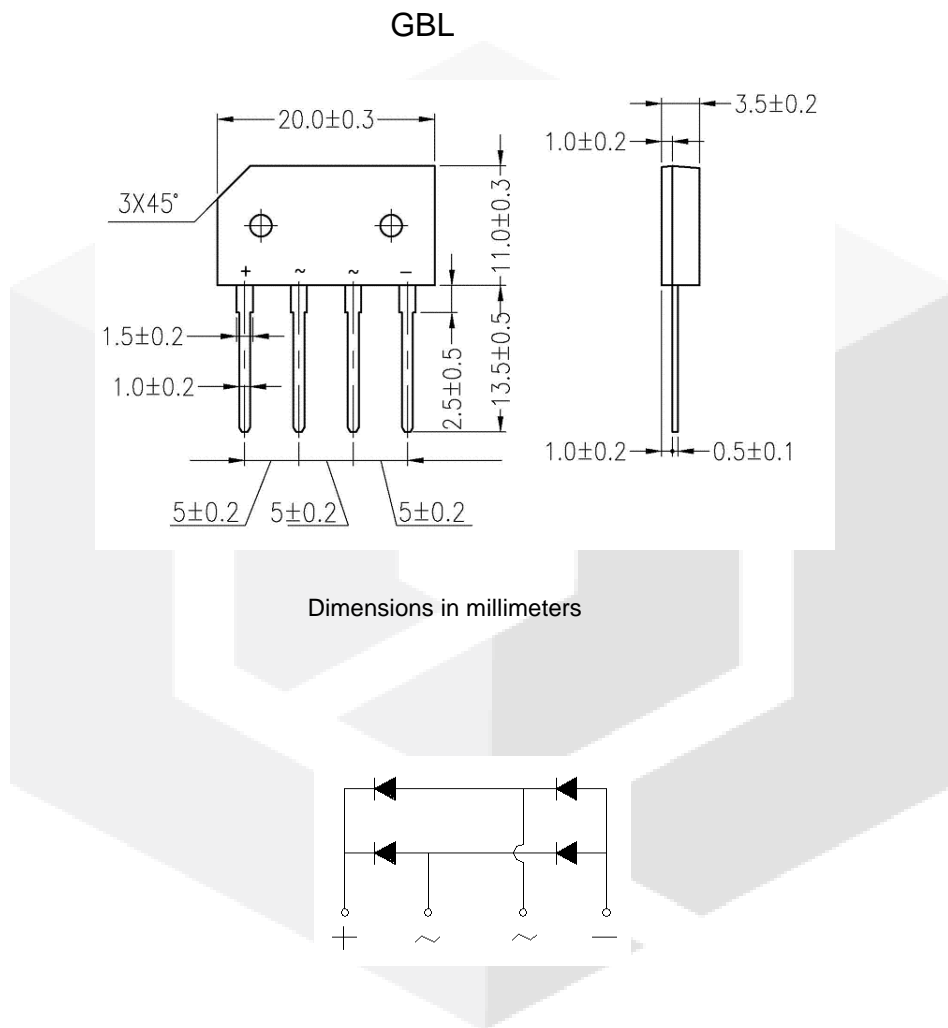
<sup>2</sup> - Unit mounted on P.C.B. At 0.375" (9.5 mm) lead length and 0.5" x 0.5" (12 mm x 12 mm) pad

<sup>3</sup> - 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.



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