

## Single Phase Glass Passivated Silicon Bridge Rectifier

#### 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

#### Maximum ratings at Tc = 25 °C, unless otherwise specified

Maximum ratings at re = 25°C, unless otherwise specified									
Parameter	Symbol	Conditions	GBL06	GBL08	GBL10	Unit			
Repetitive peak reverse voltage	V <sub>RRM</sub>		600	800	1000	V			
RMS reverse voltage	V <sub>RMS</sub>		420	560	700	V			
DC blocking voltage	V <sub>DC</sub>		600	800	1000	V			
Operating temperature	Tj		-55 to 150	-55 to 150	-55 to 150	°C			
Storage temperature	T <sub>stg</sub>		-55 to 150	-55 to 150	-55 to 150	°C			

#### Electrical characteristics at Tc = 25 °C, unless otherwise specified

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

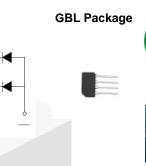
For capacitive load derate current by 20%.

Parameter	Symbol	Conditions	GBL06	GBL08	GBL10	Unit
Maximum average forward rectified current	Ι <sub>Ο</sub>	$T_c = 50 \ ^{\circ}C \ (Note \ 1)$	4.0	4.0	4.0	А
		$T_c = 40 \ ^{\circ}C \ (Note 2)$	3.0	3.0	3.0	
Peak forward surge current	I <sub>FSM</sub>	t <sub>p</sub> = 8.3 ms, half sine	135	135	135	А
Maximum instantaneous forward voltage drop per leg	V <sub>F</sub>	I <sub>F</sub> = 4 A	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>R</sub>	T <sub>a</sub> = 25 °C	5	5	5	μA
		T <sub>a</sub> = 125 °C	500	500	500	
Rating for fusing	l <sup>2</sup> t	t < 8.3 ms	75	75	75	A <sup>2</sup> sec
Typical junction capacitance per leg (Note 3)	C <sub>j</sub>		40	40	40	pF
Typical thermal resistance per leg	$R_{\Theta J A}$	(Note 1)	22	22	22	°C/W
	$R_{\Theta JL}$	(Note 2)	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) AI 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)

 $^{\rm 3}$  - Measured at 1.0 MHz and applied reverse bias of 4.0 V



 $I_0 = 4 A$ 

V<sub>RRM</sub> = 600 V -1000 V



# GBL06 thru GBL10

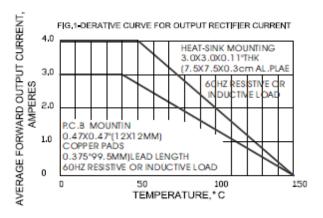
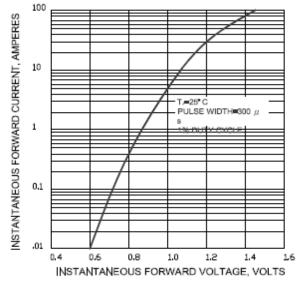
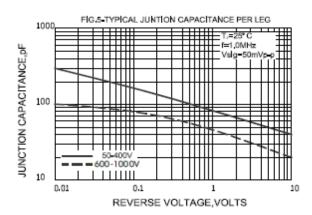
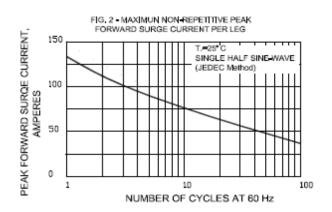
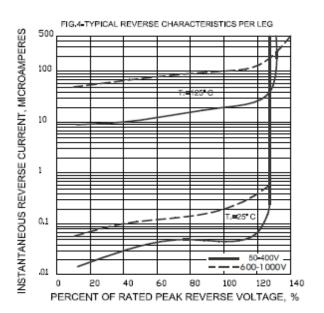


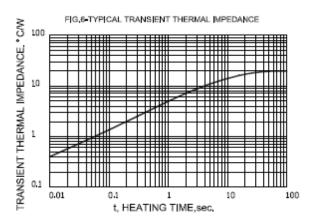
FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG















### Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

