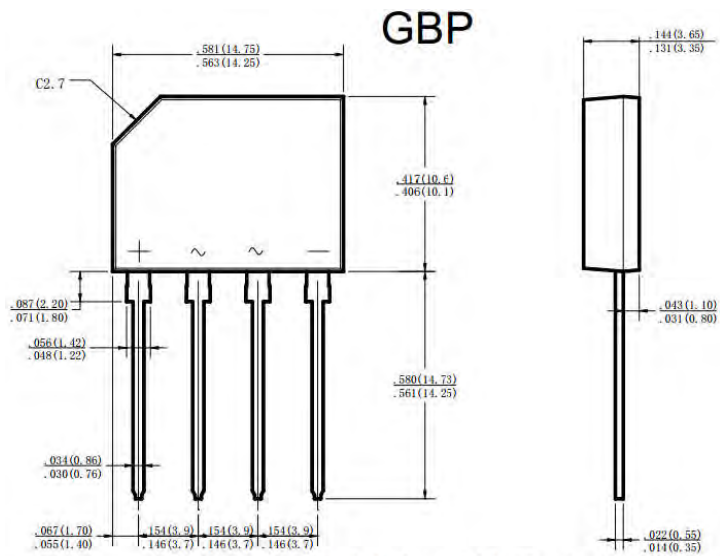
Glass Passivated Single-Phase Bridge Rectifier
Reverse Voltage 200 and 1000V Forward Current 3.0A

Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V- 0
- ◆ High surge current capability
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junction



Dimensions in inches and (millimeters)

Mechanical Data

Case: Molded plastic body over passivated junctions

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

High temperature soldering guaranteed: 260℃/20 seconds

Mounting Position: Any

Absolute Maximum Ratings TL= 25℃ unless otherwise specified.

Parameter	Symbol	GBP302	GBP304	GBP306	GBP308	GBP310	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward output Ta=55℃	$I_{F(AV)}$	3.0					A
Peak forward surge current single sine- wave superimposed on rated load (JEDEC Method)	I_{FSM}	60					A
Rating for fusig (t<8.3ms)	I^2t	14.94					A^2sec
Typical junction capacitance per leg at 4.0V 1.0Mhz	CJ	25					pF
Operating junction temperature range	T_J	- 55 to +150					℃
Storage temperature range	T_{STG}	- 55 to +150					℃

Electrical Characteristics TL=25 ℃ unless otherwise specified.

Maximum instantaneous forward voltage drop per leg at 3.0A	VF	1.10	V
Maximum DC reverse current at Ta=25℃	IR	5	μA
rated DC blocking voltage per leg Ta=125℃		100	
Typical thermal resistance per leg (1)	$R_{\theta JA}$	30	℃/W
	$R_{\theta JL}$	11	

Note

(1) Units mounted on PCB with 0.47× 0.47(12× 12mm) Copper Pads

RATINGS AND CHARACTERISTIC CURVES

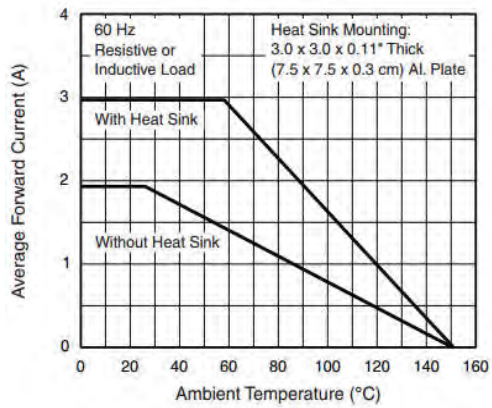


Fig. 1 - Forward Current Derating Curve

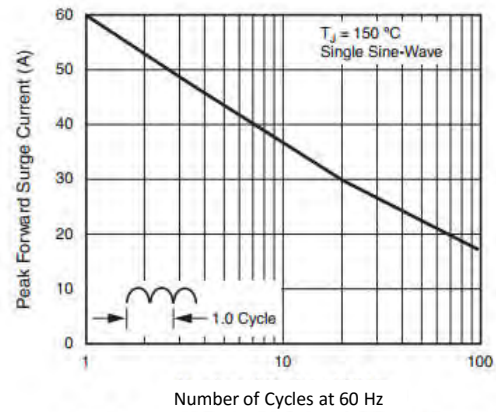


Fig. 2 - Derating Curve Output Rectified Current

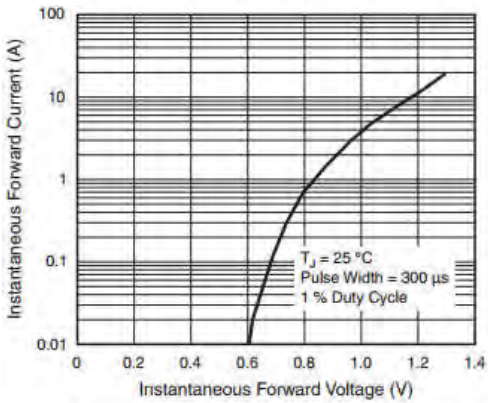


Fig. 3 - Typical Forward Characteristics Per Diode

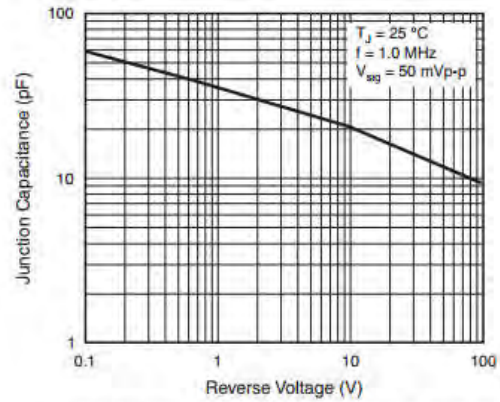


Fig. 5 - Typical Junction Capacitance Per Diode