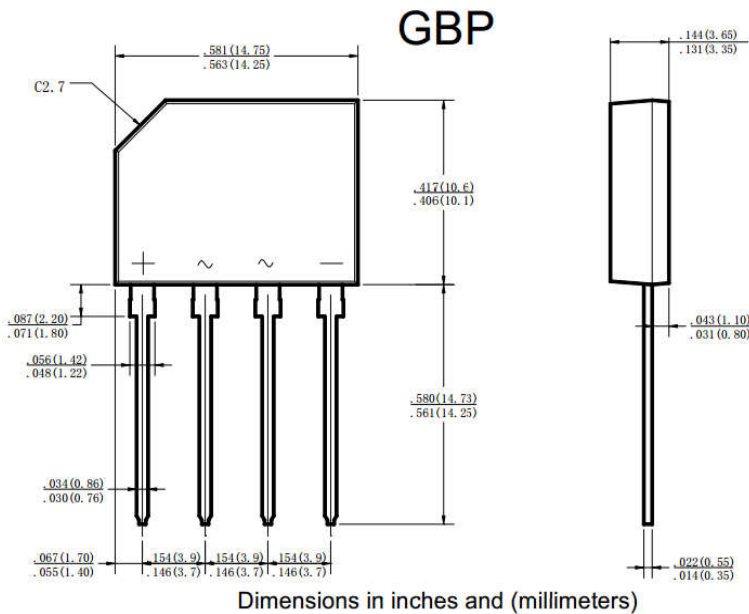


GBP402 thru GBP410

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 200 and 1000V
Forward Current 4.0A



Features

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

Mechanical Data

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
 High temperature soldering guaranteed:
 260°C/20 seconds
Mounting Position: Any

Absolute Maximum Ratings TL=25°C unless otherwise specified.							
Parameter	Symbol	GBP402	GBP404	GBP406	GBP408	GBP410	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	$I_{F(AV)}$	4.0					A
Peak forward surge current single sine-wave	I_{FSM}	80					A
superimposed on rated load (JEDEC Method)							
Rating for fusig ($t < 8.3ms$)	I^2t	26.5					A ² sec
Typical junction capacitance per leg at 4.0V 1.0Mhz	C _J	25					pF
Operating junction temperature range	T _J	-55 to +150					°C
Storage temperature range	T _{STG}	-55 to +150					°C

Electrical Characteristics TL=25°C unless otherwise specified.				
Maximum instantaneous forward voltage drop per leg at 2.0A	VF	1.10		V
Maximum DC reverse current at Ta=25°C	IR	5		μA
rated DC blocking voltage per leg Ta=125°C		100		
Typical thermal resistance per leg (1)	R _{θJA}	32		°C/W
	R _{θJL}	15		

Note

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

GBP402 thru GBP410

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Derating Curve Output Rectified Current

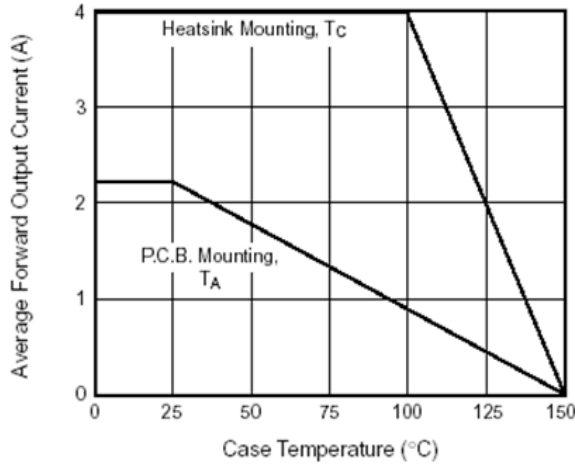


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

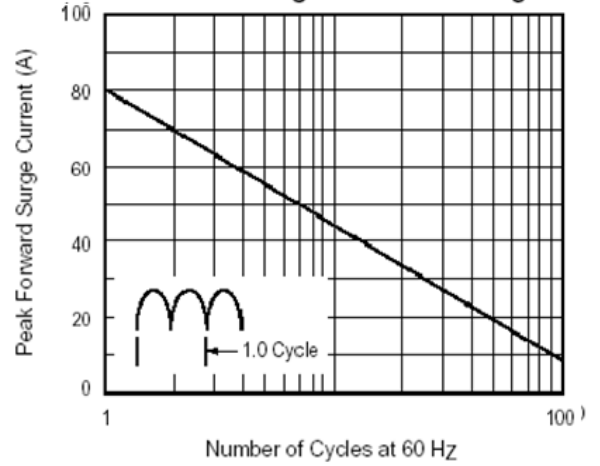


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

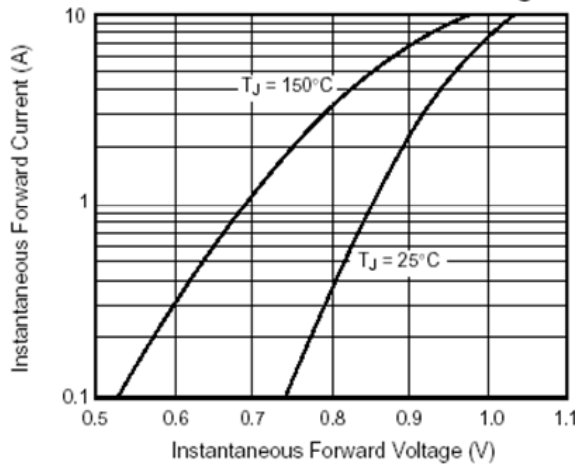


Fig. 4 – Typical Reverse Characteristics Per Leg

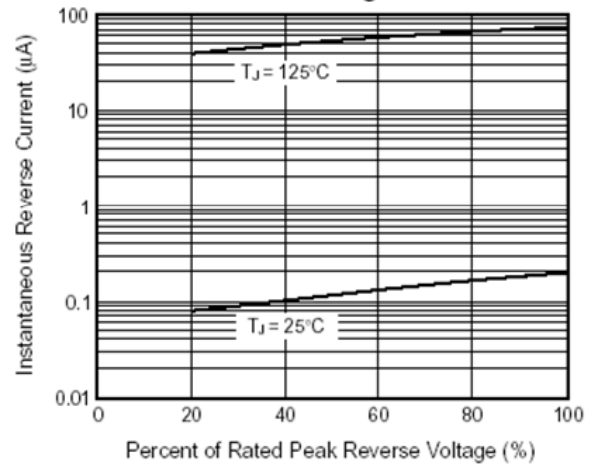


Fig. 5 – Typical Junction Capacitance Per Leg

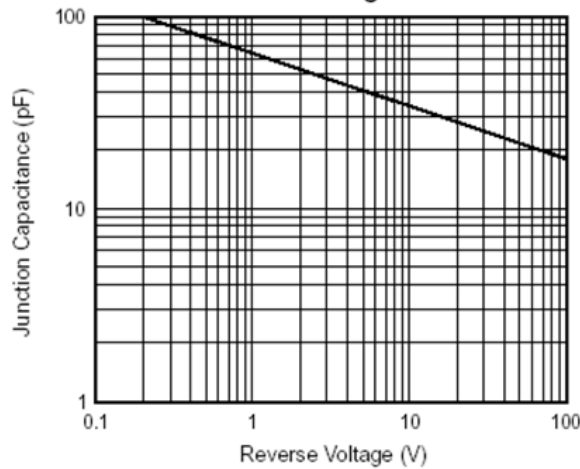


Fig. 6 – Typical Transient Thermal Impedance Per Leg

