

## FEATURES

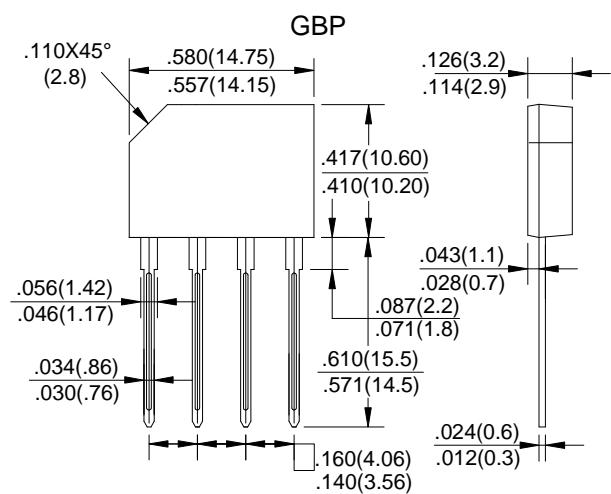
- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Polarity: marked on body
- \* Mounting position: Any
- \* Weight: 4.8 grams

## VOLTAGE RANGE

600 to 1000 Volts

## CURRENT

6.0 Ampere



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
 Single phase half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	Symbols	GBP606	GBP608	GBP610	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	Volts
Average Rectified Output Current	$I_{(AV)}$	Without heat sink @ $T_c=90^\circ C$ With heat sink @ $T_c=90^\circ C$		3.0 6.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$			150	Amp
Maximum Forward Voltage at 6.0A DC and 25°C	$V_F$			1.1	Volts
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	at $T_A=25$ $T_A=100$		5.0 500	$\mu$ Amp
Typical Junction Capacitance (Note 1)	$C_J$			21	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$			55	/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$			15	/W
Operating and Storage Temperature Range	$T_J, T_{stg}$			-55 to +150	

### NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

## RATING AND CHARACTERISTIC CURVES (GBP606 THRU GBP610)

Fig. 1 Output Current Derating Curve

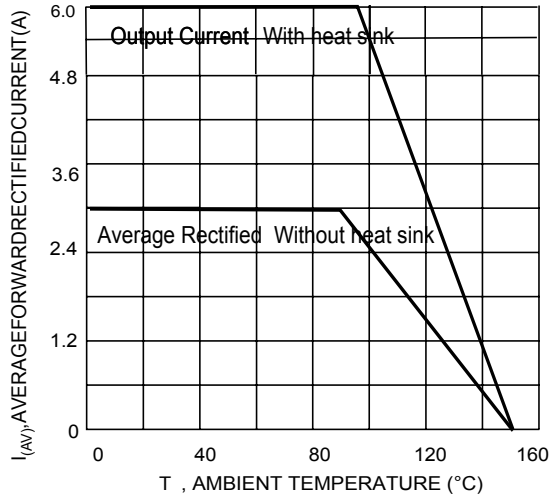


Fig. 2 Typical I Forward Characteristics (per leg)

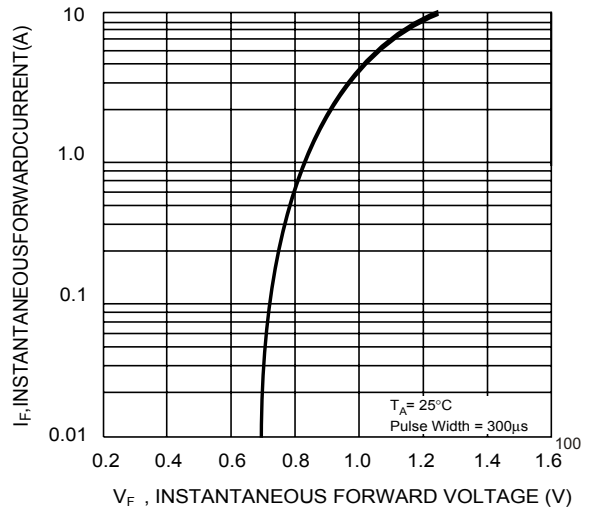


Fig. 3 Maximum Peak Forward Surge Current (per leg)

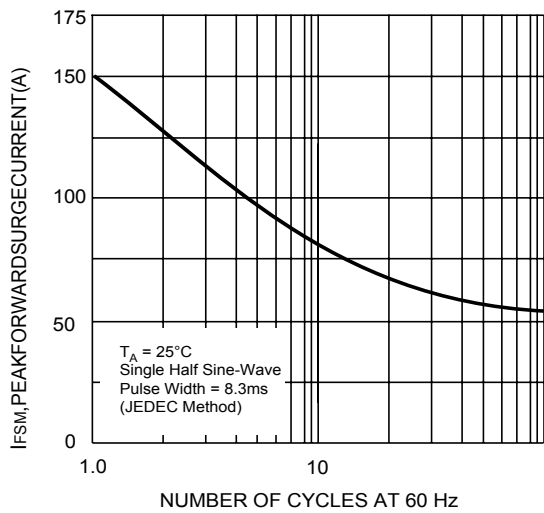


Fig. 4 Typical Junction Capacitance Per Diode

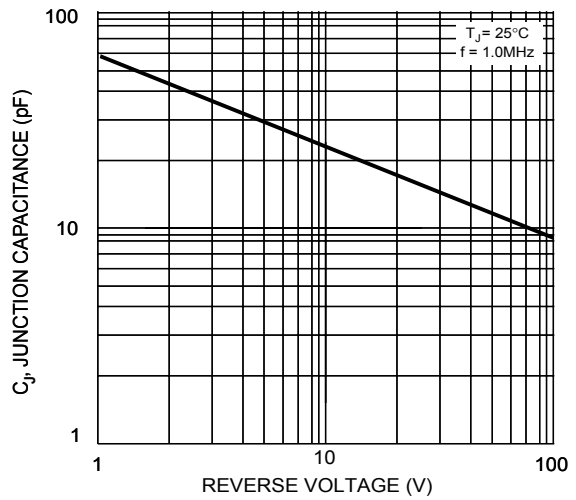


Fig. 5 Typical Reverse Characteristics (per element)

