

GBP606 THRU GBP610

SINGLE PHASE 6.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

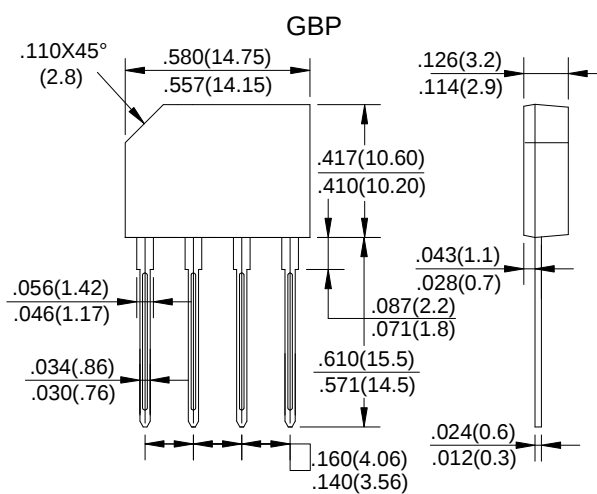
- * Ideal for printed circuit board
- * Low forward voltage
- * Low leakage current
- * Polarity: marked on body
- * Mounting position: Any
- * Weight: 4.8 grams

VOLTAGE RANGE

600 to 1000 Volts

CURRENT

6.0 Ampere



Dimensions in millimeters

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 @ $T_c=90^\circ C$			Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	3.0 6.0			Amp
Maximum Forward Voltage at 6.0A DC and 25 °C	V_F	1.1			Volts
Maximum Reverse Current at $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R	5.0 500			uAmp
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

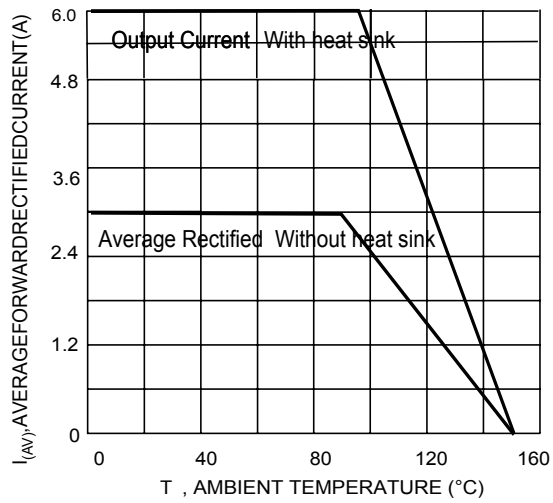


Fig. 2 Typical I Forward Characteristics (per leg)

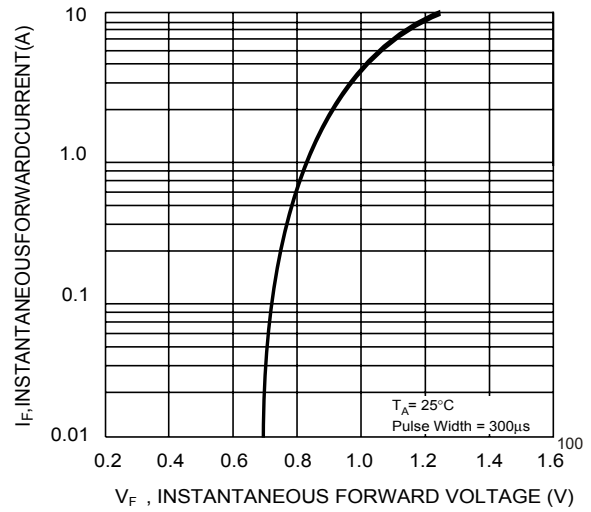


Fig. 3 Maximum Peak Forward Surge Current (per leg)

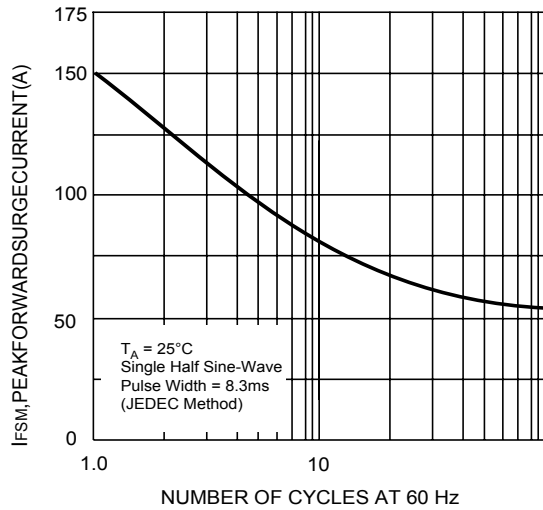


Fig.4 Typical Junction Capacitance Per Diode

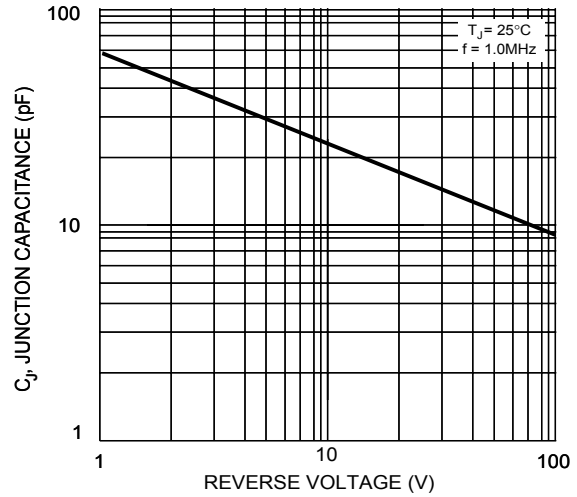


Fig. 5 Typical Reverse Characteristics (per element)

