

GBP506 THRU GBP510 SINGLE PHASE 5.0 AMP BRIDGE RECTIFIERS

FEATURES

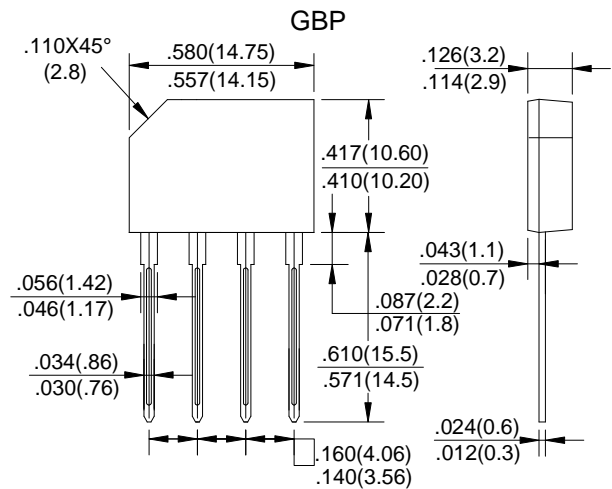
- * Ideal for printed circuit board
- * Low forward voltage
- * Low leakage current
- * Polarity: marked on body
- * Mounting position: Any
- * Weight: 4.8 grams

VOLTAGE RANGE

600 to 1000 Volts

CURRENT

5.0 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	GBP506	GBP508	GBP510	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
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length at $T_A=50$	$I_{(AV)}$	5.0			Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120			Amp
Maximum Forward Voltage at 5.0A DC and 25	V_F	1.1			Volts
Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	I_R	10.0 500			μ Amp
Typical Junction Capacitance (Note 1)	C_J	25			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25			/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16			/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 (GBP506 THRU GBP510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

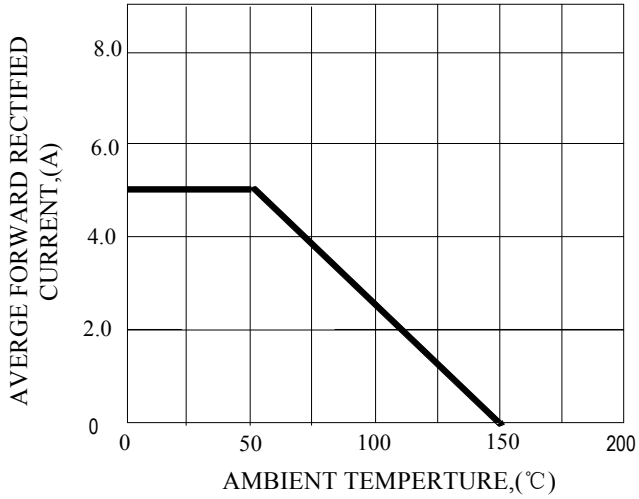


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

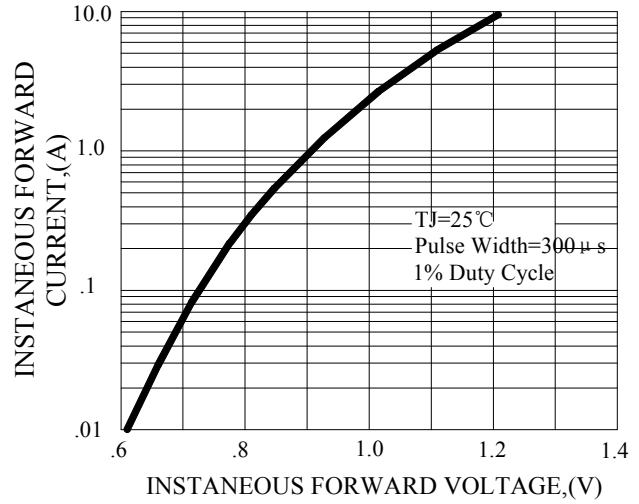


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

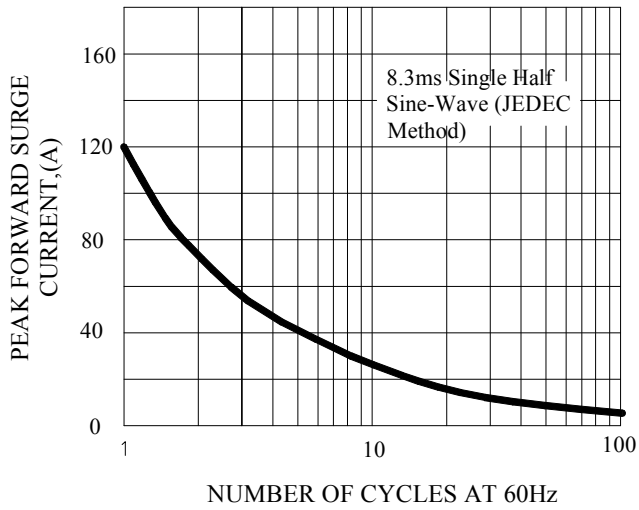


FIG.4-TYPICAL REVERSE CHARACTERISTICS

