



## GBP506 THRU GBP510 SINGLE PHASE 5.0 AMP BRIDGE RECTIFIERS

### FEATURES

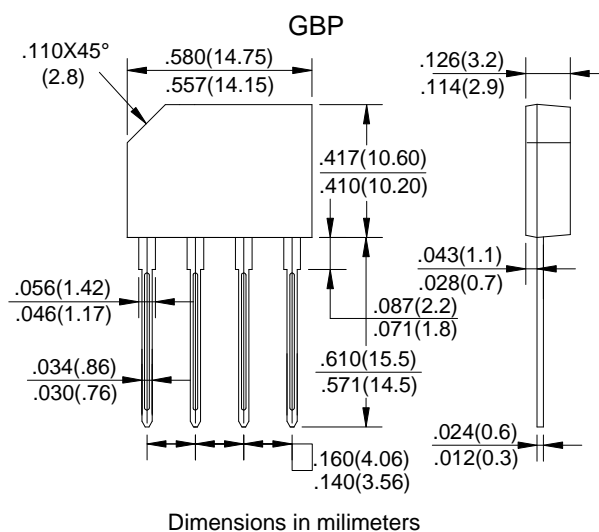
- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Polarity: marked on body
- \* Mounting position: Any
- \* Weight: 4.8 grams

### 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			$\mu$ Amp
Typical Junction Capacitance (Note 1)	$C_J$	25			pF
Typical Thermal Resistance (Note 2)	$R_{JA}$	25			/W
Typical Thermal Resistance (Note 2)	$R_{JL}$	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 from 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

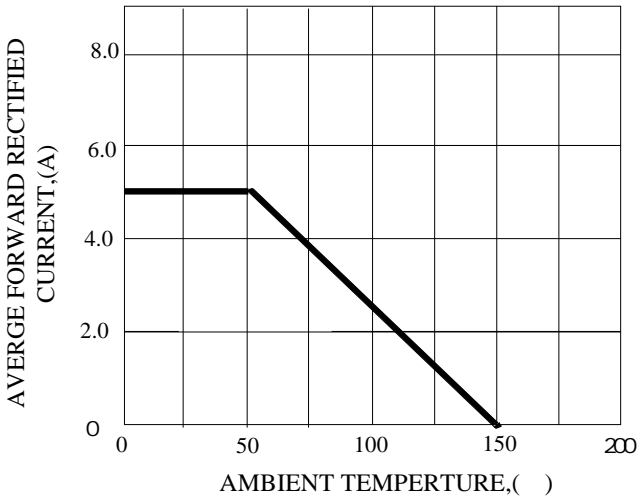


FIG.2-TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

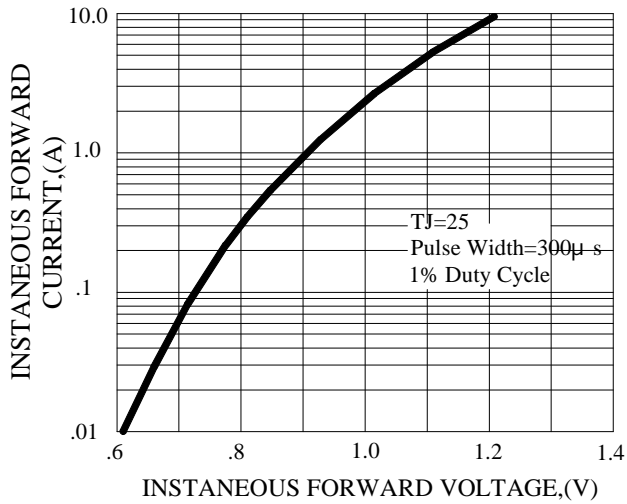


FIG.3-MAXIMUN NON-REPETITIVE  
FORWARD SURGE CURRENT

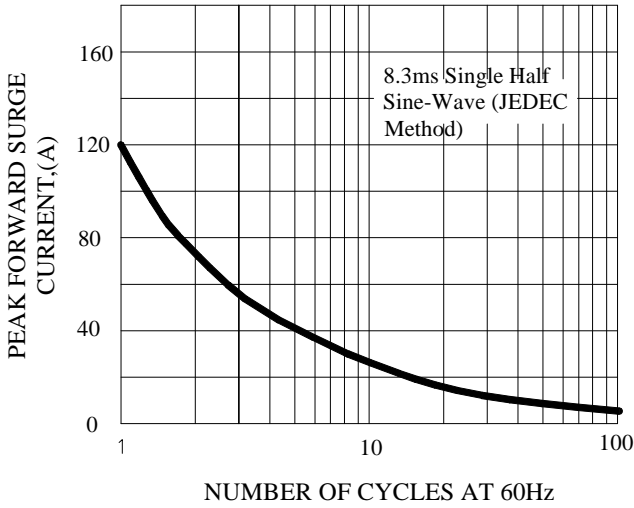


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

