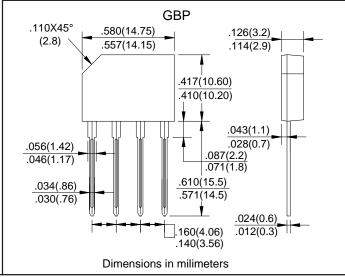


## **FEATURES**

- \* 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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwies 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 <sub>RRM</sub>	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	800	1000	Volts
Maximum Average Forward Rectified Current	1	5.0			Amp
.375"(9.5mm) Lead Length at T <sub>A</sub> =50	I <sub>(AV)</sub>				
Peak Forward Surge Current,					
8.3ms single half-sine-wave	I <sub>FSM</sub> 120				Amp
superimposed on rated load (JEDEC method)					
Maximum Forward Voltage	$V_{\rm F}$	1.1			Volts
at 5.0A DC and 25	V F				
Maximum Reverse Current at T <sub>A</sub> =25	$I_R$	10.0 500			uAmp
at Rated DC Blocking Voltage T <sub>A</sub> =100	I <sub>R</sub>				
Typical Junction Capacitance (Note 1)	$C_{J}$	25			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25			/W
Typical Thermal Resistance (Note 2)	$R_{ heta JL}$	16			/W
Operating and Storage Temperature Range	T <sub>J</sub> , Tstg	-55 to +150			

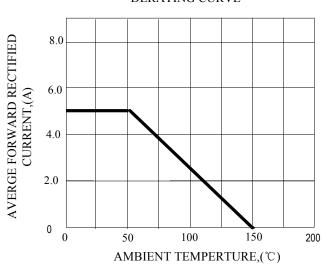
#### **NOTES:**

- 1- Measured at 1  $MH_Z$  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.

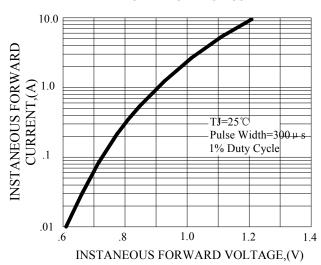
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#### RATING AND CHARACTERISTIC CURVES (GBP506 THRU GBP510)

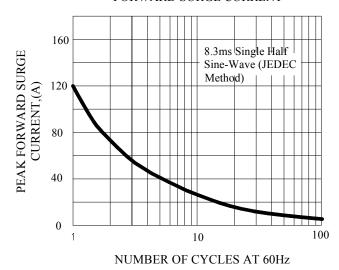
# FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



#### FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



### FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT



## FIG.4-TYPICAL REVERSE

