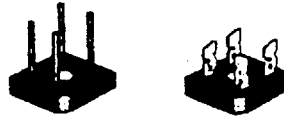


GBPC15005 thru GBPC1510

**15 AMP
GLASS PASSIVATED
SINGLE-PHASE BRIDGE RECTIFIERS**



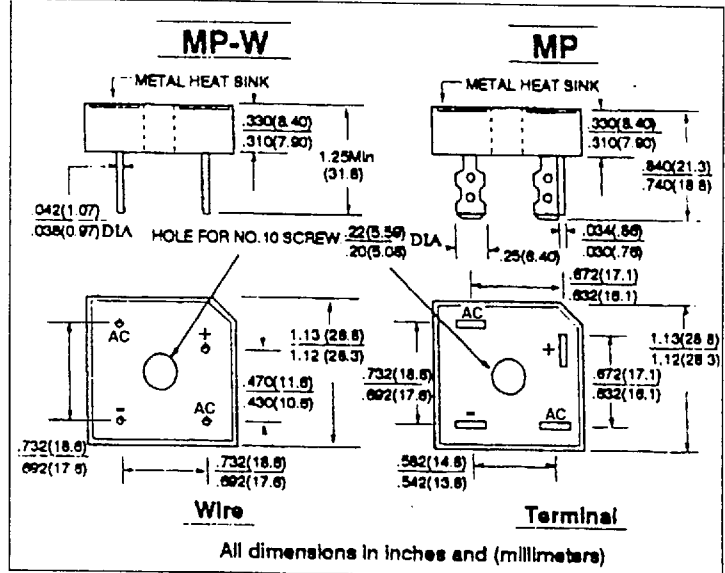
**VOLTAGE RANGE
50 to 1000 Volts
CURRENT
15 Amperes**

FEATURES

- Rating to 1000V PRV
- 300 amperes surge capability
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- UL recognized file #95060

MECHANICAL DATA

- CASE : Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Mounting : Hole for #10 screw
- Weight : 0.63 ounce 18.0 grams (Terminal)
0.51 ounce 14.5 grams (Wire)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	GBPC	15005	1501	1502	1504	1506	1508	1510	UNITS
		15005W	1501W	1502W	1504W	1506W	1508W	1510W	
Maximum Recurrent Peak Reverse Voltage	V_{rrm}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{rms}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current $T_C = 70^\circ C$ (with heatsink)	$I_{(AV)}$	15							Amps
Peak Forward Surge Current 8.3ms single half-sine-wave superimposed on rated load. (JEDEC Method)	I_{FSM}	300							
Maximum Forward Voltage/element @ 7.5A.	V_F	1.1							Volts
Maximum DC Reverse Current $T_C = 25^\circ C$ at Rated DC Blocking Voltage $T_C = 125^\circ C$	I_R	5							μA
I^2t Rating for fusing ($t < 8.3ms$) *	I^2t	374							A^2s
Typical Junction Capacitance per element. **	C_J	300							pF
Typical Thermal Resistance ***	$R_{\theta JC}$	1.4							$^\circ C/W$
Operating Temperature Range	T_J	-55 to 150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to 150							

NOTES : * Measured non-repetitive for greater than 1ms but less than 8.3ms.
** Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
*** Thermal Resistance Junction to Case, Case mounted on 220 x 220 x 50mm Aluminum Plate Heatsink.

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FIG.1 - FORWARD CURRENT DERATING CURVE

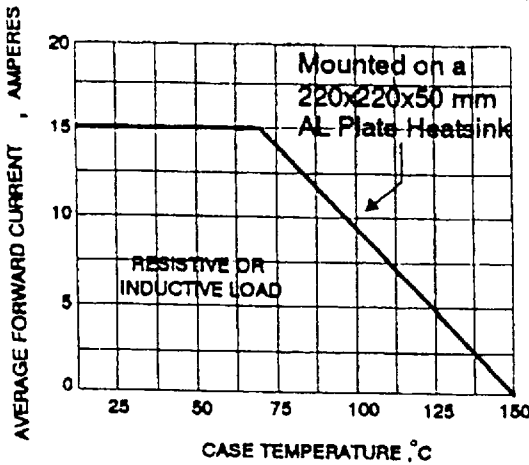


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

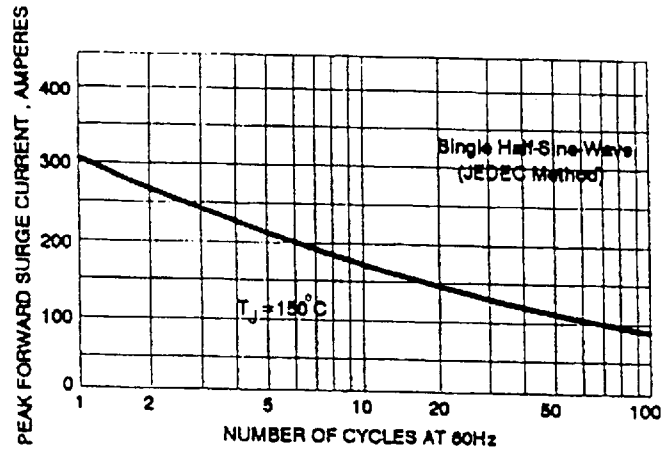


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

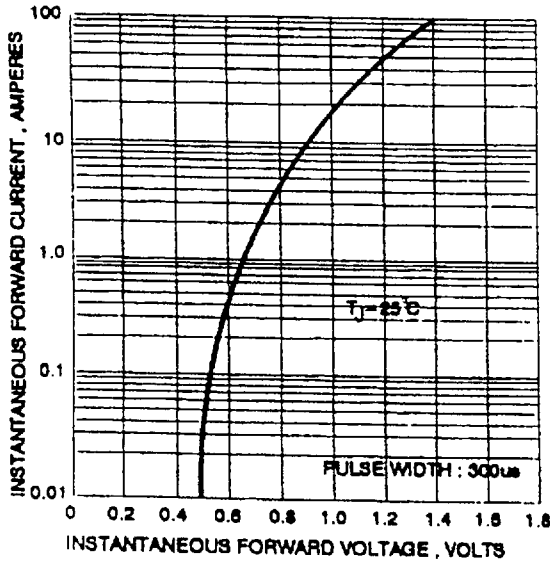


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

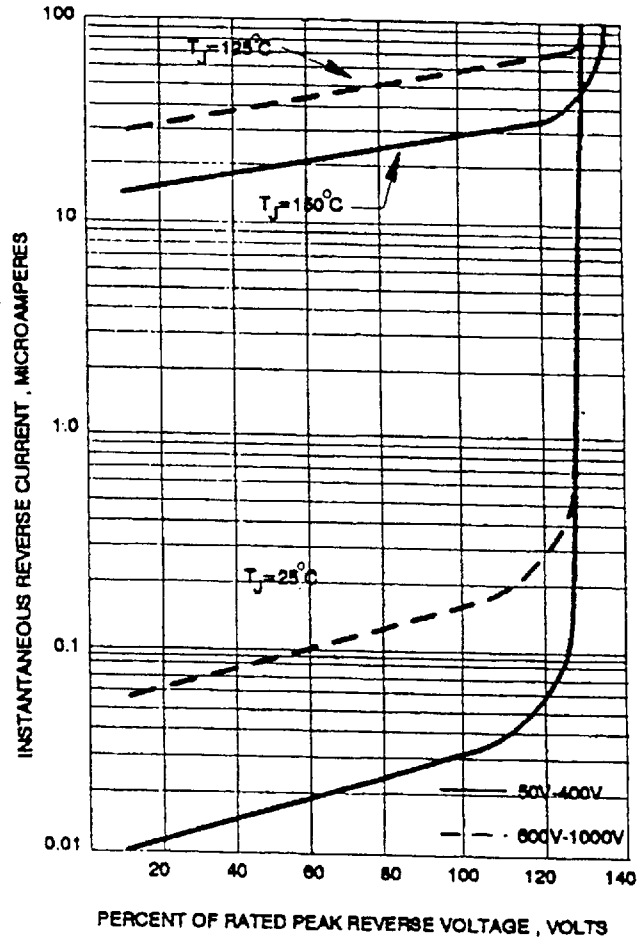


FIG.5 - TYPICAL JUNCTION CAPACITANCE

