



# DATA SHEET

## GBL400~GBL408

**IN-LINE MINIATURE SINGLE PHASE SILICON BRIDGE RECTIFIER**

**VOLTAGE - 50 to 800 Volts CURRENT - 4.0 Amperes**

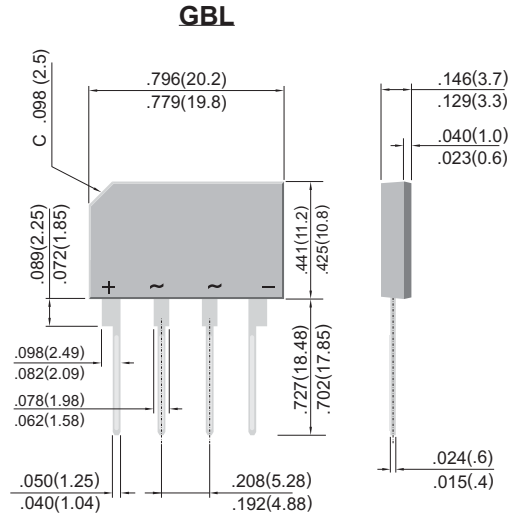
Unit: inch ( mm )

### FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 70 Amperes peak

### MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202, Method 208  
Mounting position: Any  
Weight: 0.2 ounce, 5.6 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

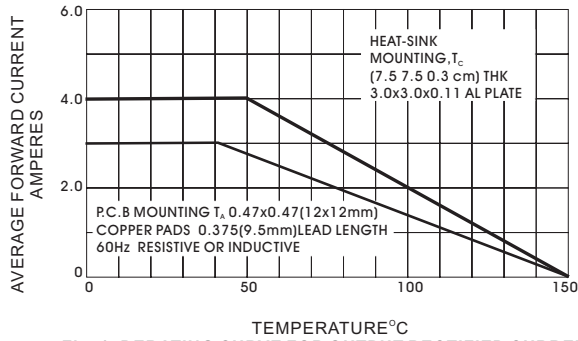
	GBL400	GBL401	GBL402	GBL404	GBL406	GBL408	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	$V_{RRM}$
Maximum RMS Input Voltage	35	70	140	280	420	560	$V_{RMS}$
Maximum DC Blocking Voltage	50	100	200	400	600	800	$V_{DC}$
Maximum Average Forward Rectified Output Current at $T_C=50^\circ C$ $T_J=40^\circ C$	4.0						$A_{(AV)}$
	3.0						$A_{(AV)}$
Rating for fusing ( $t < 8.3ms$ )	20						$A^2Sec$
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method) $T_J=150^\circ C$	70						$A_{PK}$
Maximum Instantaneous Forward Voltage Drop per element at 2.0A Amperes	1.0						$V_{PK}$
Typical Junction Capacitance per Leg (Note 1)	65.0			25.0			pF
Maximum Reverse Leakage at rated Dc Blocking Voltage per Leg $T_A=25^\circ C$ $T_C=100^\circ C$	5.0						$\mu A$
	500.0						
Typical Thermal Resistance per leg (Note 2) $R_{\theta JL}$ (Note 3) $R_{\theta JL}$	34.0						$^\circ C / W$
	15.0						
Operating and Storage Temperature Range, $T_J$ , $T_{STG}$	-55 to +150						$^\circ C$

#### NOTES:

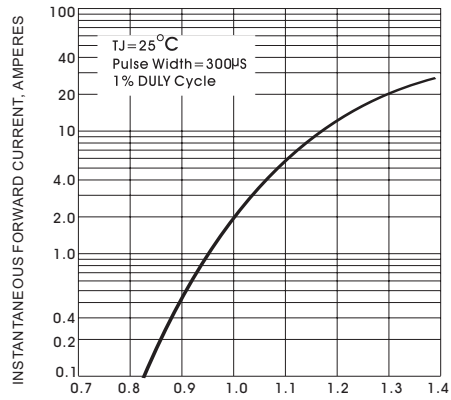
1. Mounted at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375" (9.5mm) lead length and 0.5X0.5" (12X12mm) copper pads.
3. Units Mounted 3.0 X 3.0 X 0.11" thick (7.5 X 7.5 X 0.3 cm) AL plate.



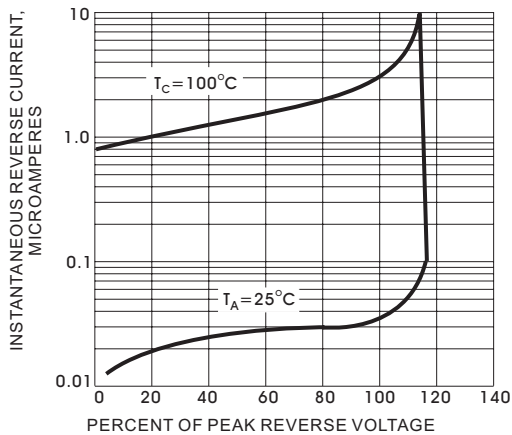
**RATING AND CHARACTERISTIC CURVES**



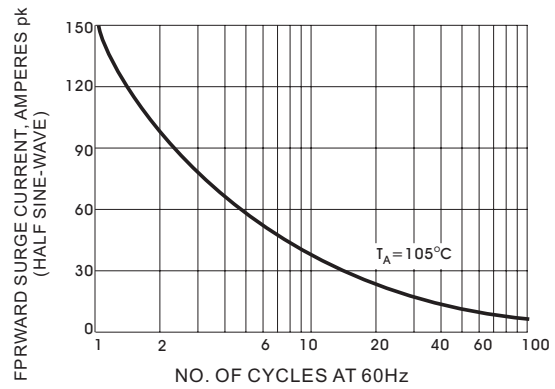
**Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT**



**Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS**



**Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

