



# DATA SHEET

## GL2500~GL2508

### IN-LINE HIGH CURRENT SILICON BRIDGE RECTIFIER

**VOLTAGE** 50 to 800 Volts **CURRENT** 25 Amperes



Recognized File #E111753

#### FEATURES

- Plastic Case With Heatsink For Heat Dissipation.
- Surge Overload Ratings to 400 Amperes.
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Pb free product are available : 99% Sn can meet Rohs environment substance directive request

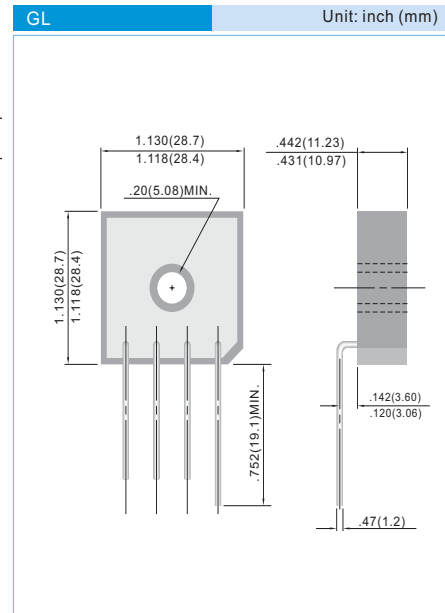
#### MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounted in bridge encapsulation.

Weight: 1.0 ounce, 30 gram

Terminals: Wire Lead  $\phi$  50 mils

Mounting Position: Any



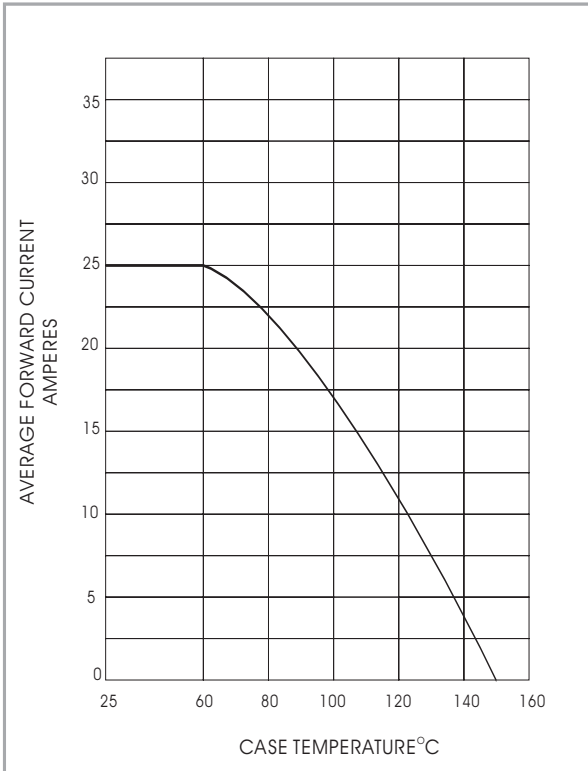
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

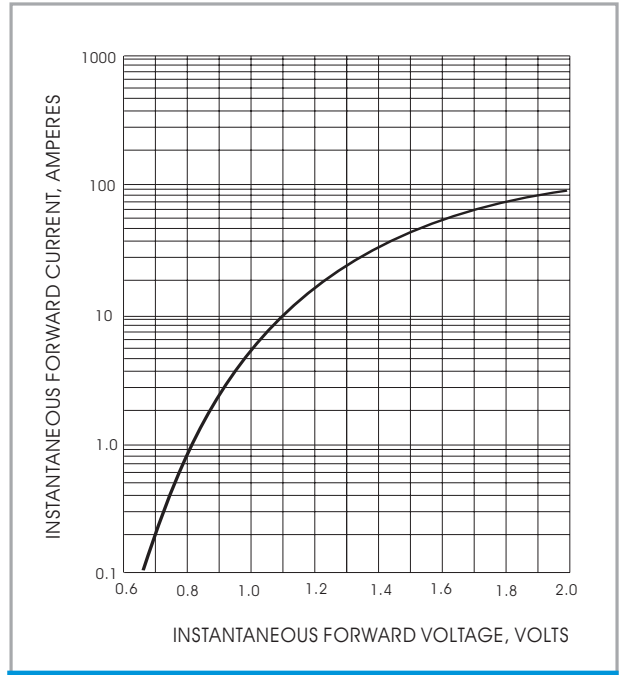
PARAMETER	SYMBOL	GL2500	GL2501	GL2502	GL2504	GL2506	GL2508	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	V
DC Output Voltage, Resistive load		30	62	124	250	380	505	V
DC Output Voltage, Capacitive load		50	100	200	400	600	800	V
Maximum Average Forward Current for Resistive Load at $T_c=55^\circ C$	$I_{AV}$	25.0						A
Non-repetitive Peak Forward Surge Current at Rated Load	$I_{FSM}$	300						A
Maximum Forward Voltage per Bridge Element at 12.5A Specified Current	$V_F$	1.2						V
Maximum Reverse Leakage Current at Rated @ $T_A=25^\circ C$ DC Blocking Voltage $T_A=100^\circ C$	$I_R$	10 1000						$\mu A$
$I^2T$ Rating for fusing ( $t < 8.35ms$ )	$I^2T$	374						$A^2 SEC$
Typical Thermal Resistance per leg	$R_{\theta JC}$	2.0						$^\circ C / W$
Operating and Storage Temperature Range	$T_J, T_A$	-50 TO +150						$^\circ C$



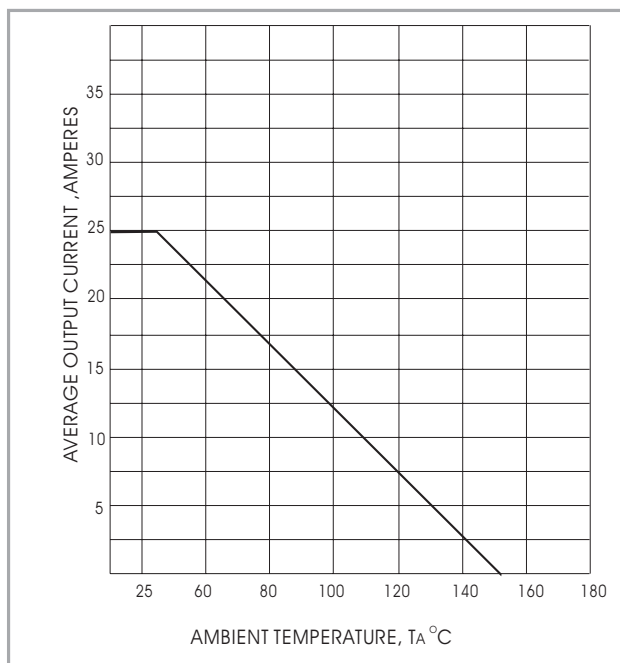
RATING AND CHARACTERISTIC CURVES



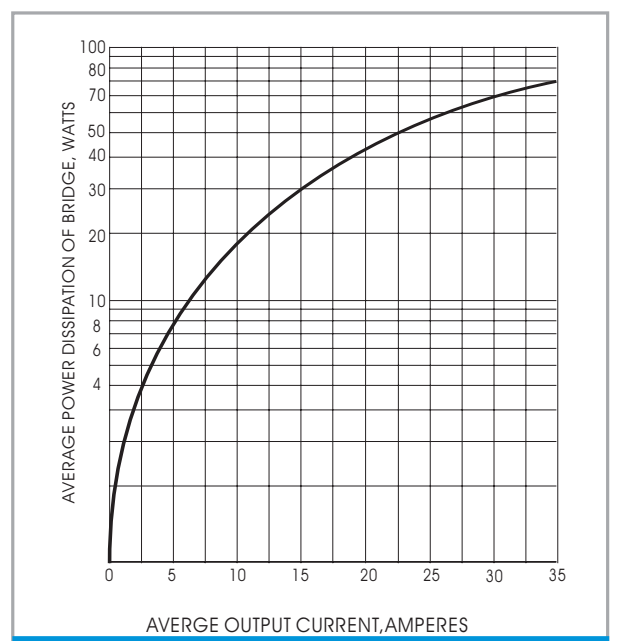
**Fig. 1- OUTPUT CURRENT VS.CASE TEMPERATURE  
RESISTIVE OR INDUCTIVE LOAD  $T_J = 150^\circ\text{C}$**



**Fig. 2- TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS  
AT  $T_J = 25^\circ\text{C}$**



**Fig. 3- OUTPUT CURRENT VS.AMBIENT TEMPERATURE  
RESISTIVE OR INDUCTIVE LOAD  
BRIDGE MOUNTED ON A 8" x 8" ALUMINUM PLATE 25"THICK**



**Fig. 4- POWER DISSIPATION VS.AVERAGE OUTPUT  
CURRENT RESISTIVE OR INDUCTIVE LOAD  
 $T_J = 150^\circ\text{C}$**