



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

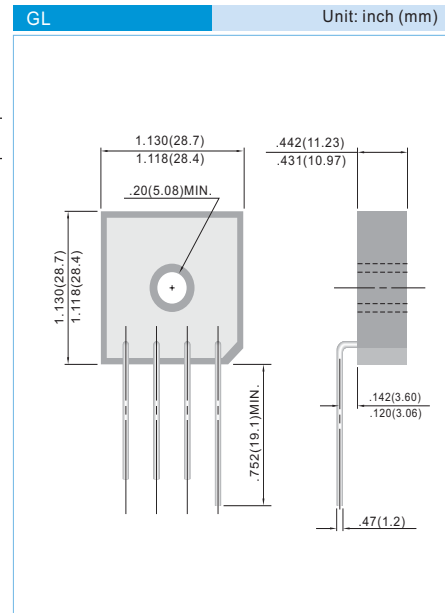
MECHANICAL DATA

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

Weight: 1.0 ounce, 30 gram

Terminals: Wire Lead ϕ 50 mils

Mounting Position: Any



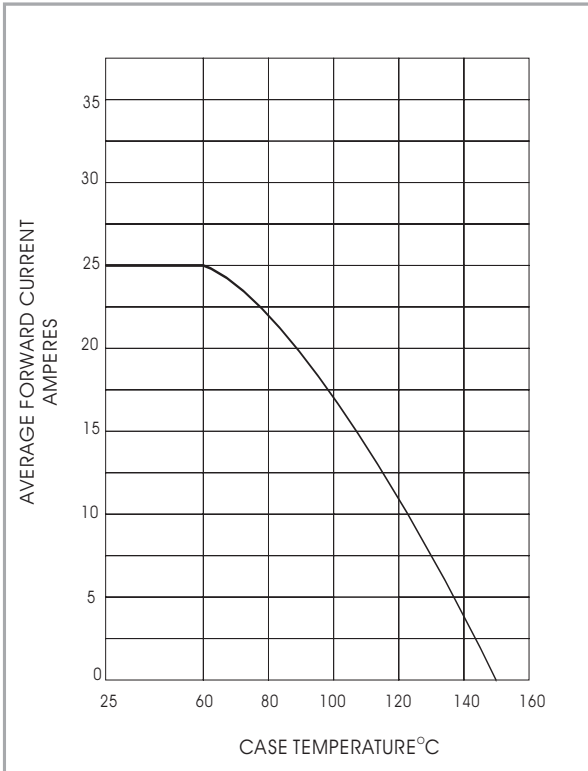
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%

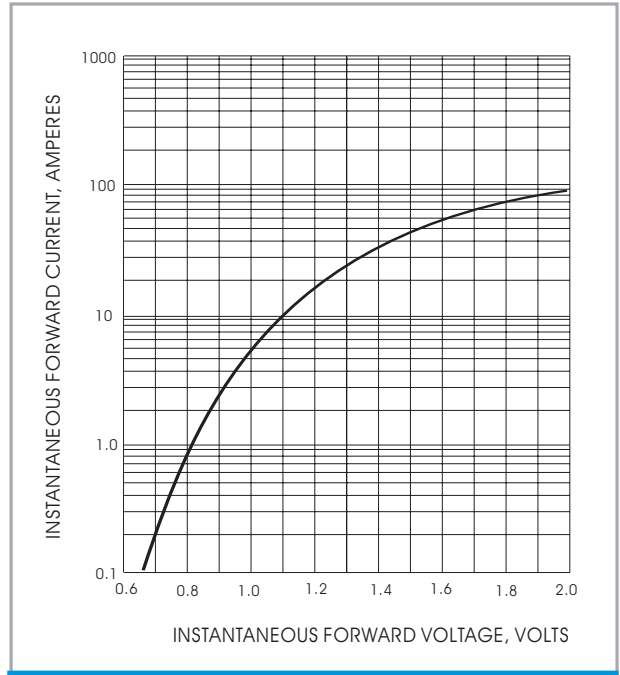
PARAMETER	SYMBOL	GL2500	GL2501	GL2502	GL2504	GL2506	GL2508	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
DC Output Voltage, Resistive load		30	62	124	250	380	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						μA
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						$^\circ C$



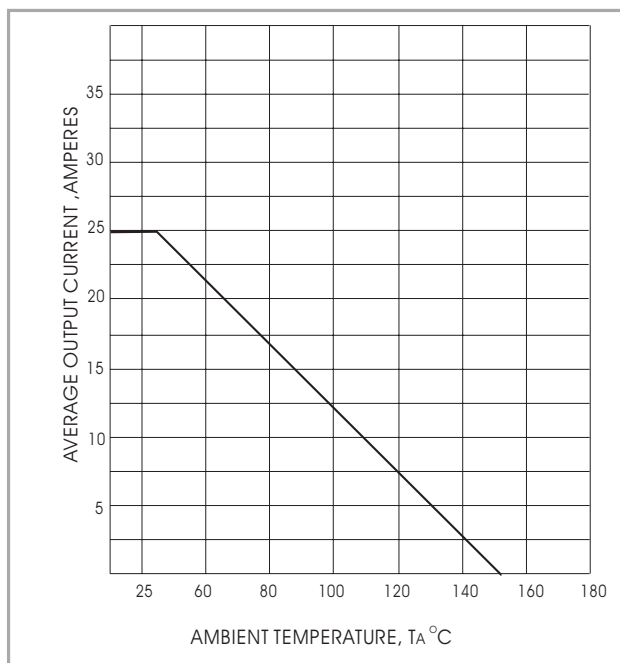
RATING AND CHARACTERISTIC CURVES



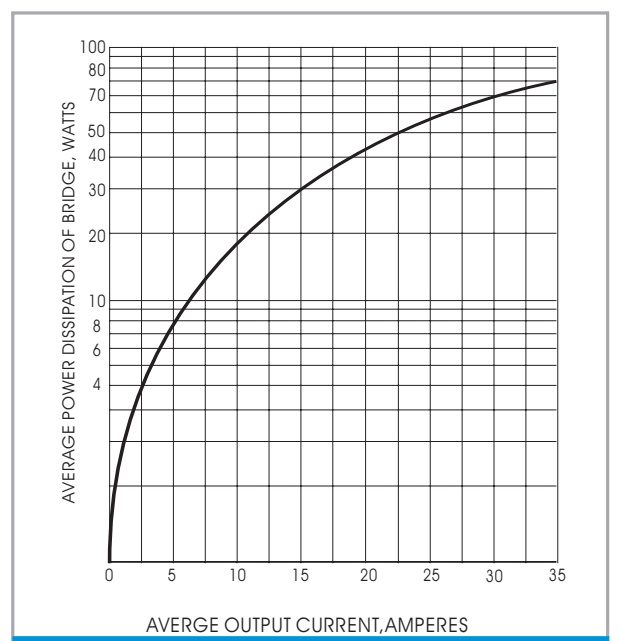
**Fig. 1- OUTPUT CURRENT VS.CASE TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD $T_J = 150^{\circ}\text{C}$**



**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
 $T_J = 150^{\circ}\text{C}$**