

# GL1500, 2500, 3500 SERIES

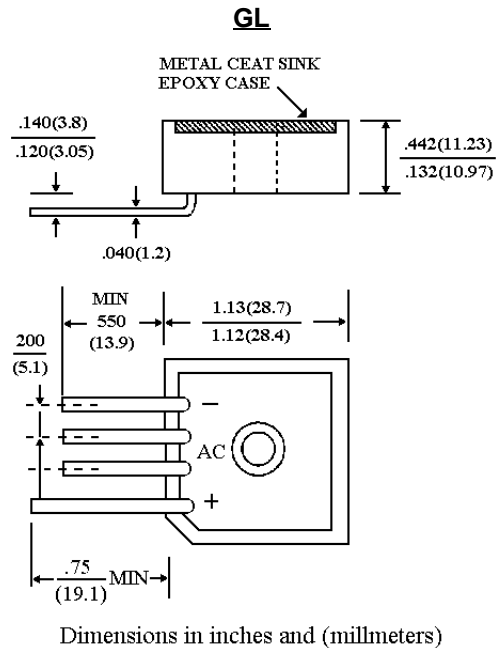
## IN-LINE HIGH CURRENT SILICON BRIDGE RECTIFIERS VOLTAGE - 50 to 800 Volts CURRENT - 15 to 35 Amperes

### FEATURES

- Plastic Case With Heatsink For Heat Dissipation
- Surge Overload Ratings to 400 Amperes
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O

### MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounted in the bridge Encapsulation  
Weight: 1 ounce, 30 grams  
Mounting position: Any  
Terminals: Wire Lead  $\leq$  50 mils



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Inductive or resistive Load at 60Hz. For capacitive load derate current by 20%.  
All Ratings are for  $T_C=25\text{ }^{\circ}\text{C}$  unless otherwise specified.

		-00	-01	-02	-04	-06	-08	UNITS
Max Recurrent Peak Reverse Voltage		50	100	200	400	600	800	V
Max RMS Input Voltage		35	70	140	280	420	560	V
Max DC Blocking Voltage		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
Max Average Forward Current for Resistive Load at $T_C=55\text{ }^{\circ}\text{C}$	GL15	15						A
	GL25	25						A
	GL35	35						A
Non-repetitive Peak Forward Surge Current at Rated Load	GL15	300						A
	GL25	300						A
	GL35	400						A
Max Forward Voltage per Bridge Element at Specified Current	GL15 $I_F$ 7.5A	1.2						V
	GL25 12.5A							
	GL35 17.5A							
Max Reverse Leakage Current @ $T_A=25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=100\text{ }^{\circ}\text{C}$		10						$\mu\text{g A}$
		1000						
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )		374 / 664						$\text{A}^2\text{s}$
Typical Thermal Resistance (Fig. 3) $R_{\theta JC}$		2.0						$^{\circ}\text{C}/\text{W}$
Operating Temperature Range $T_J$		-55 to +150						$^{\circ}\text{C}$
Storage Temperature Range $T_A$								

# RATING AND CHARACTERISTIC CURVES

## GL1500 THRU GL3500

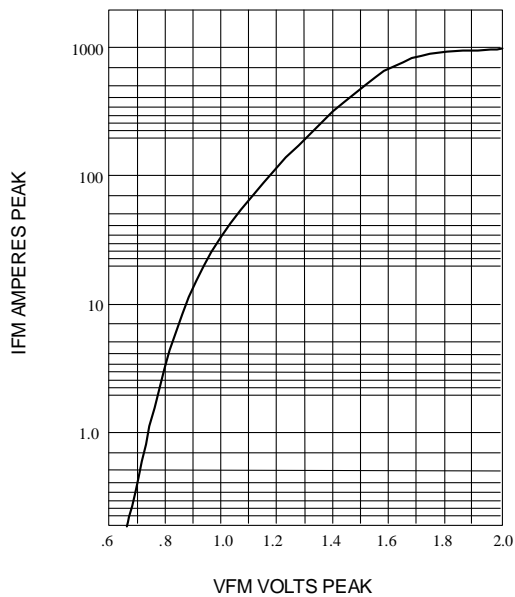


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT  $T_j = 25\text{ }^\circ\text{C}$

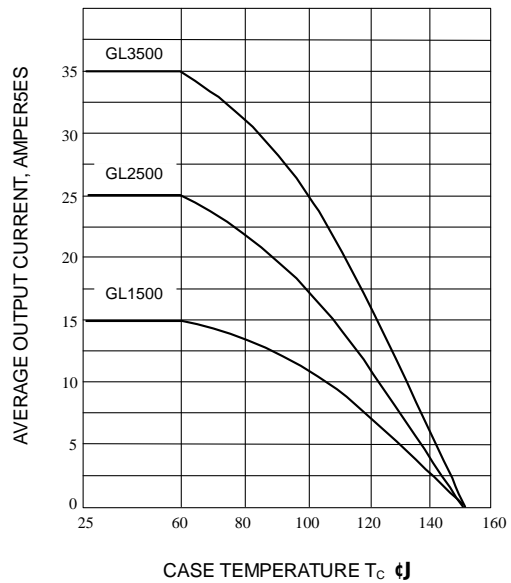


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD  $T_j = 175\text{ }^\circ\text{C}$

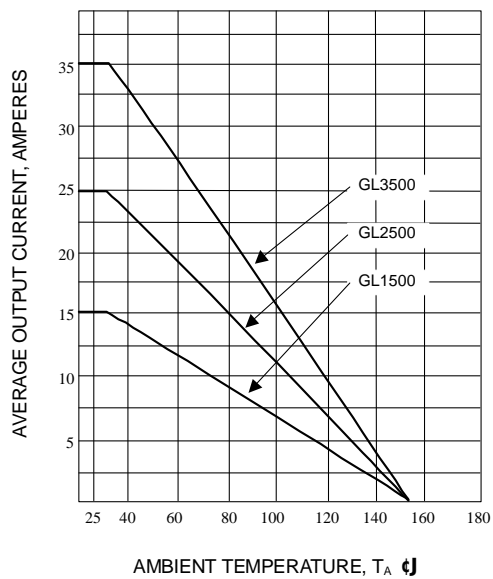


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A 8"x8" ALUMINUM PLATE 25" THICK

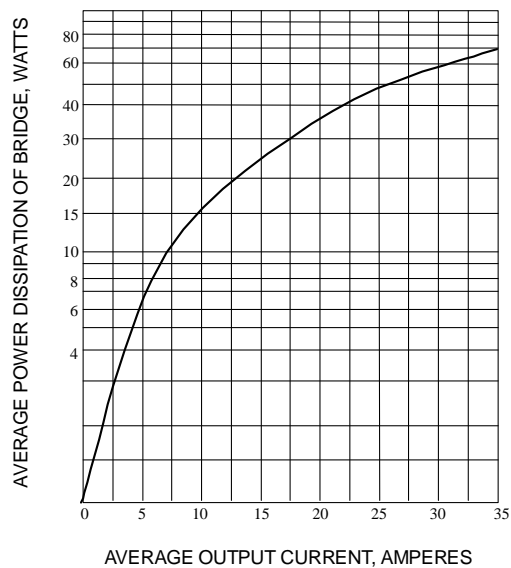


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD,  $T_j = 175\text{ }^\circ\text{C}$