

# GL1500, 2500, 3500 SERIES

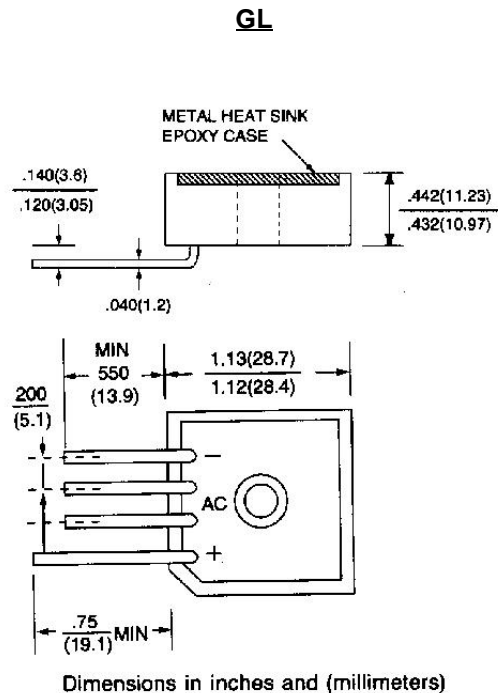
## IN-LINE HIGH CURRENT SILICON BRIDGE RECTIFIERS VOLTAGE - 50 to 800 Volts CURRENT - 15 to 35 Amperes

### 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  $\phi$  50 mils



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Inductive or resistive Load at 60Hz. For capacitive load derate current by 20%.

All Ratings are for  $T_C=25^\circ\text{C}$  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 $T_C=55^\circ\text{C}$	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 @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$			10				$\mu\text{A}$
			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 $T_J$ Storage Temperature Range $T_A$			-55 to +150				$^\circ\text{C}$

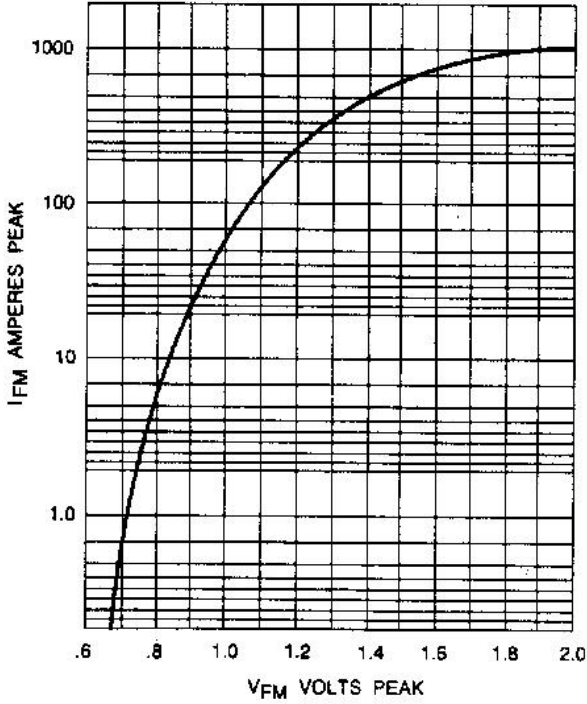


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT  $T_J=25^\circ\text{C}$

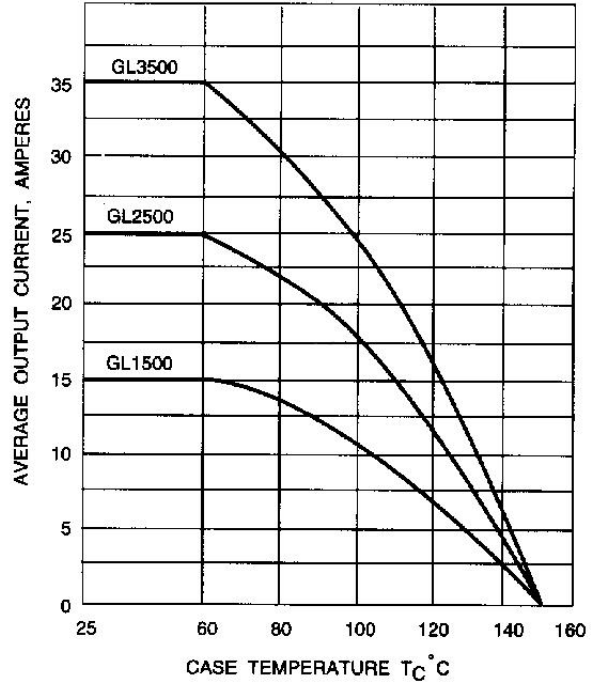


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD  $T_J=175^\circ\text{C}$

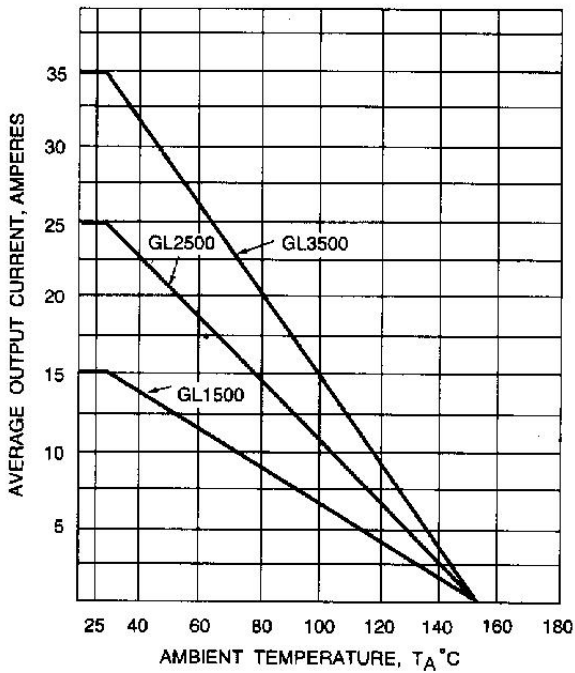


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON  $8'' \times 8''$  ALUMINUM PLATE  $25''$  THICK

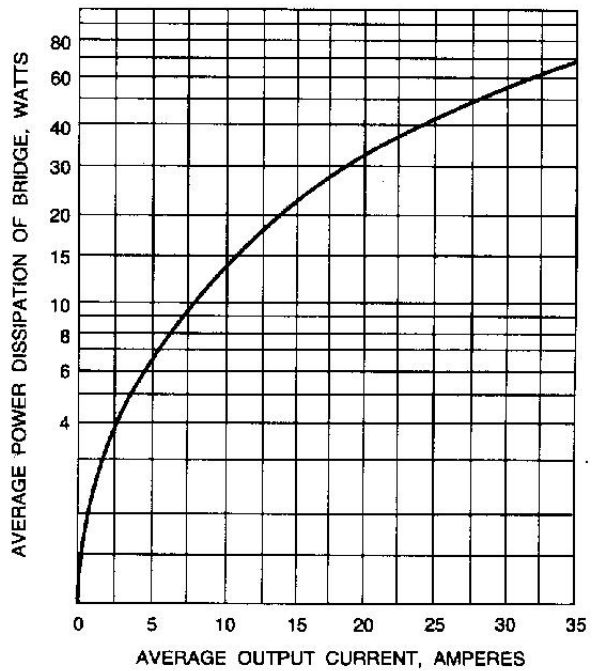


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD,  $T_J=175^\circ\text{C}$