

GL1500, 2500, 3500 SERIES

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

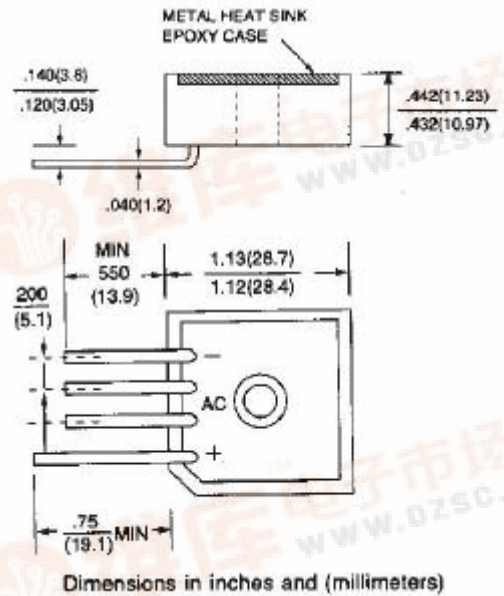
FEATURES

- 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 50 mils

GL



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

All Ratings are for $T_C=25$ 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 GL15	15						A
for Resistive Load GL25	25						A
at TC=55 GL35	35						A
Non-repetitive GL15	300						A
Peak Forward Surge Current at GL25	300						A
Rated Load GL35	400						A
Max Forward Voltage GL15 I _F 7.5A	1.2						V
per Bridge Element at GL25 12.5A							
Specified Current GL35 17.5A							
Max Reverse Leakage Current @ TA=25	10						A
at Rated DC Blocking Voltage @ TA=100	1000						
I ² t Rating for fusing (t < 8.3ms)	374 / 664						A ² s
Typical Thermal Resistance (Fig. 3) R _{JC}	2.0						/W
Operating Temperature Range T _J	-55 to +150						
Storage Temperature Range T _A							

RATING AND CHARACTERISTIC CURVES

GL1500 THRU GL3500

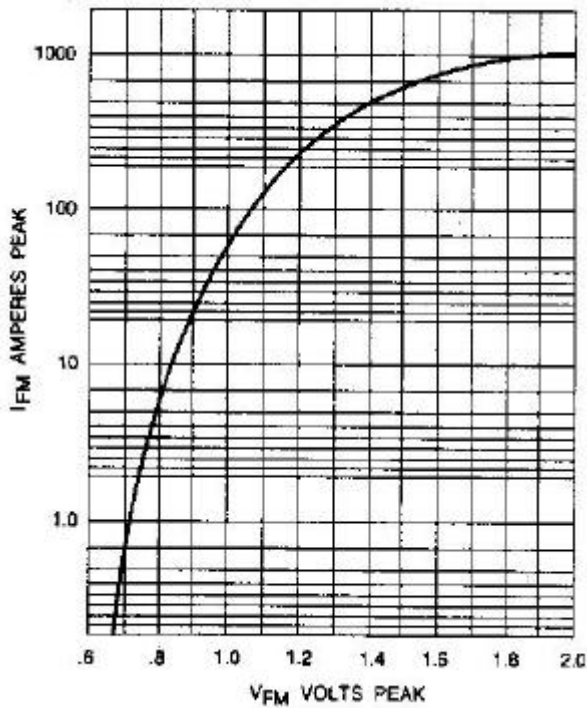


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT $T_j = 25$

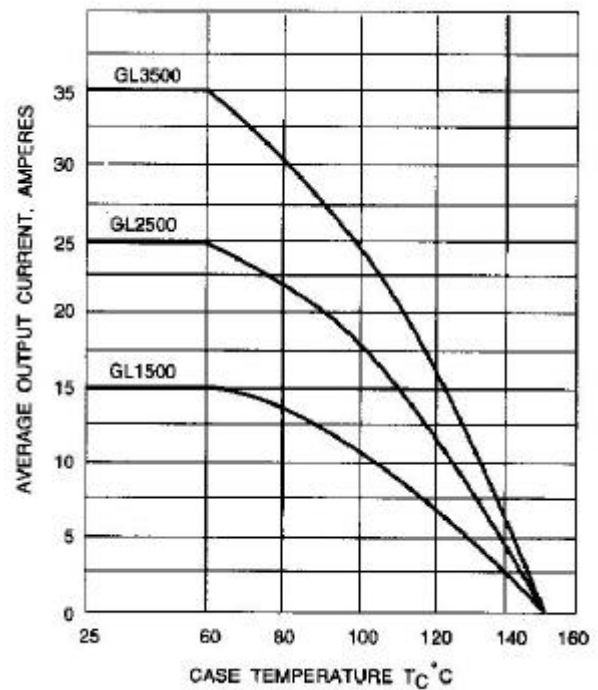


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD $T_j = 175$

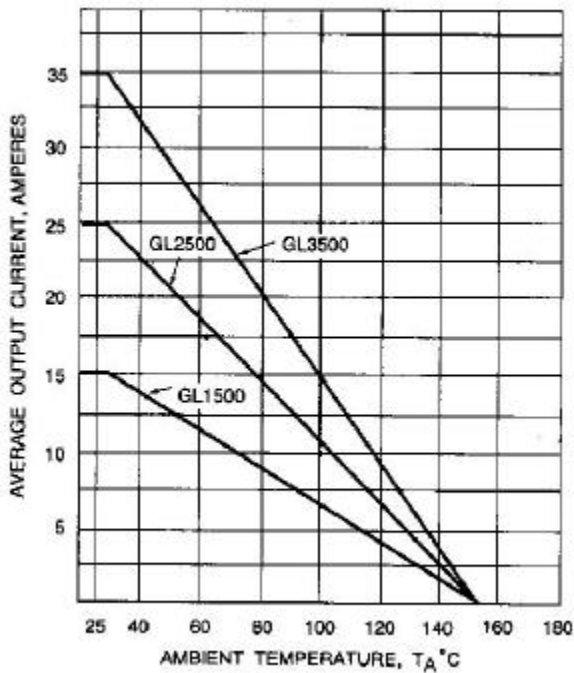


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A8"x8" ALUMINUM PLATE 25" THICK

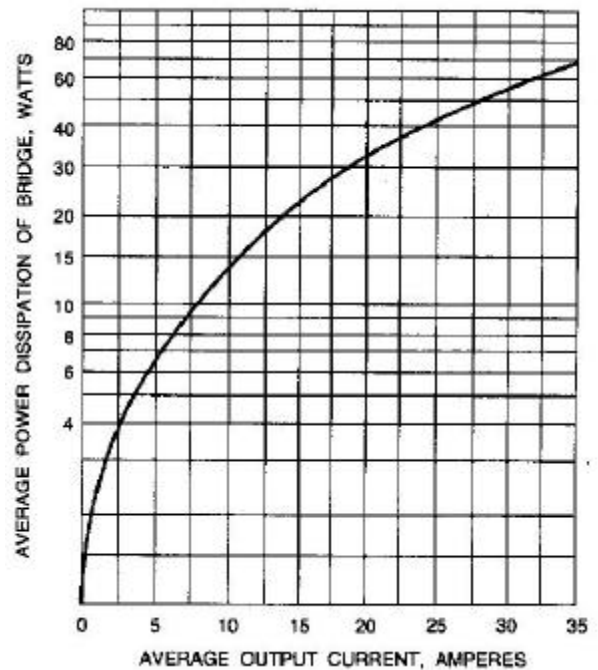


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD, $T_j = 175$