# 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**

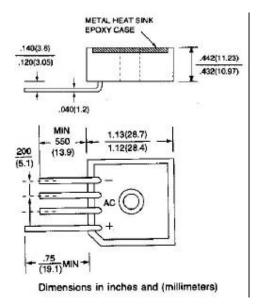
 The plastic package has Underwriters Laboratory Flammability Classification 94V-O

# **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



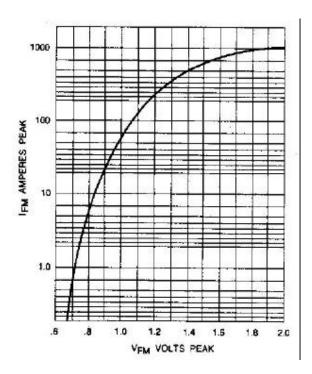
<u>GL</u>

### **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						Α
for Resistive Load GL25			25					
at TC=55 GL35			35					
Non-repetitive GL15		300						Α
Peak Forward Surge Current at	GL25	300						Α
Rated Load	GL35			40	00			Α
Max Forward Voltage	GL15 I <sub>F</sub> 7.5A							
per Bridge Element at	GL25 12.5A	1.2						V
Specified Current	GL35 17.5A							
Max Reverse Leakage Current @ TA=25		10						Α
at Rated DC Blocking Voltage @ TA=100		1000						
I <sup>2</sup> t Rating for fusing ( t < 8.3ms )		374 / 664						A <sup>2</sup> s
Typical Thermal Resistance (Fig. 3) R JC		2.0						/W
Operating Temperature Range T <sub>J</sub>			-55 to +150					
Storage Temperature Range T <sub>A</sub>								



35 GL3500

36 GL3500

37 GL1500

38 GL3500

39 GL3500

4 GL1500

5 GL1500

5 GL1500

CASE TEMPERATURE TC C

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

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

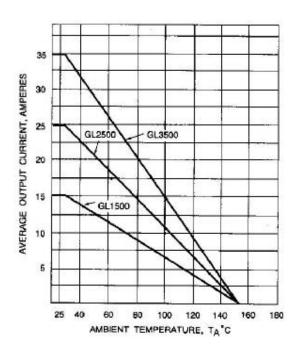


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A8"×8" ALUMINUM PLATE 25" THICK

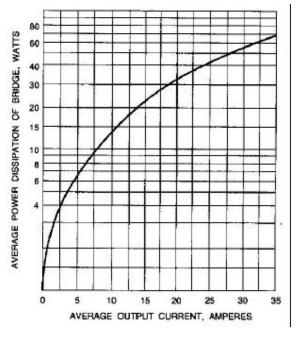


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD,  $T_{J}$ =175