



# DATA SHEET

## GL3500~GL3508

### IN-LINE HIGH CURRENT SILICON BRIDGE RECTIFIER

**VOLTAGE** 50 to 800 Volts **CURRENT** 35 Ampere

**Recognized File #E111753**

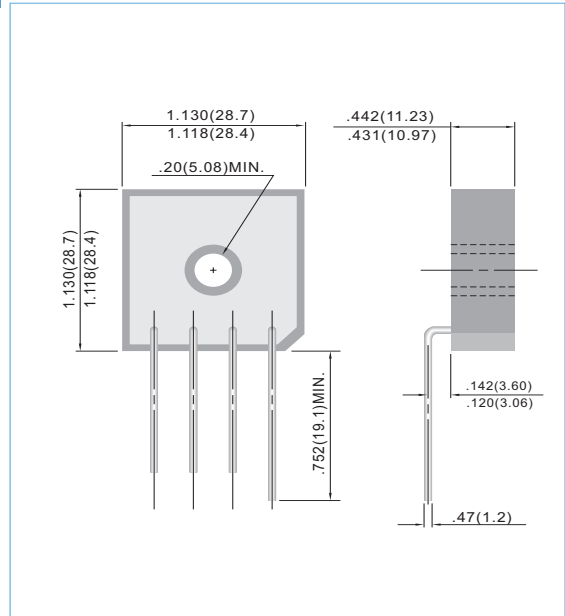
GL Unit: inch (mm)

#### FEATURES

- Plastic Case With Heatsink For Heat Dissipation.
- Surge Overload Ratings to 400 Amperes.
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Both normal and Pb free product are available :  
Normal : 80~95% Sn, 5~20% Pb  
Pb free: 98.5% Sn above

#### MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounted in bridge encapsulation.  
Weight: 1.0 ounce, 30 gram  
Terminals: Wire Lead  $\phi$  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	GL3500	GL3501	GL3502	GL3504	GL3506	GL3508	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS Bridge Input 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, Capacitive load		30	62	124	250	380	505	V
DC Output Voltage, Resistive load		50	100	200	400	600	800	V
Maximum Average Forward Current For Resistive Load at $T_C=55^\circ C$	$I_{AV}$	35						A
Non-repetitive Peak Forward Surge Current at Rated Load	$I_{FSM}$	400						A
Maximum Forward Voltage per Bridge Element at 17.5A Specified Current	$V_F$	1.1						V
Maximum Reverse Leakage Current at Rated @ $T_A=25^\circ C$ Dc Blocking Voltage @ $T_A=100^\circ C$	$I_R$	10 1000						$\mu A$
$I^2t$ Rating for fusing ( $t < 8.35ms$ )	$I^2t$	664						$A^2t$
Typical Thermal Resistance per leg	$R_{\theta JC}$	2.0						$^\circ C/W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150						$^\circ C$



**RATING AND CHARACTERISTIC CURVES**

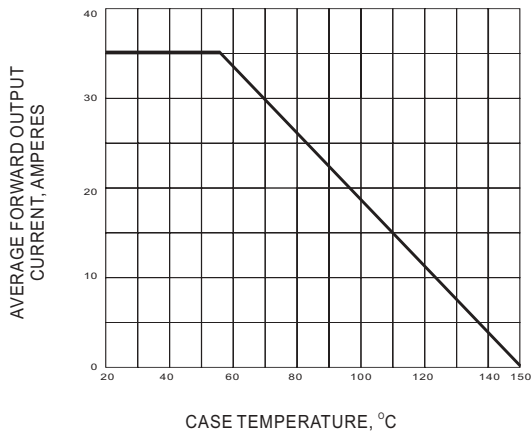


Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

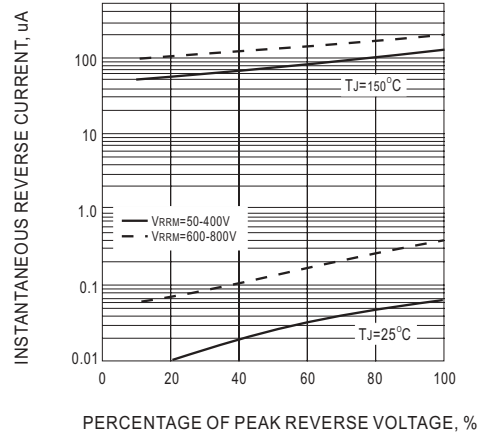


Fig.2 TYPICAL REVERSE CHARACTERISTICS

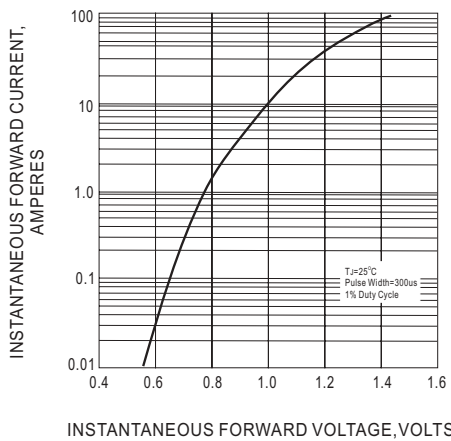


Fig.3 TYPICAL FORWARD CHARACTERISTIC