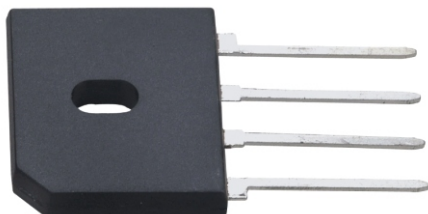


# GBU8A thru GBU8M SERIES

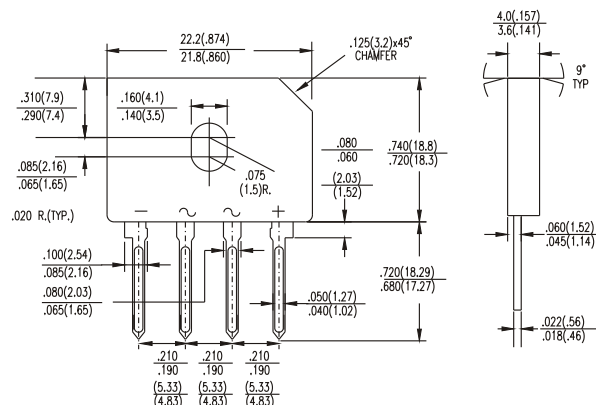
SILICON BRIDGE RECTIFIERS  
GLASS PASSIVATED  
BRIDGE RECTIFIERS



CHENG-YI  
ELECTRONIC



REVERSE VOLTAGE -50 to 1000 Volts  
FORWARD CURRENT -8.0 Amperes



Dimensions in inches and (millimeters)

## FEATURES

- Surge overload rating-175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has Underwriters Laboratory Flammability classification 94V-O
- 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%.

		GBU8A	GBU8B	GBU8D	GBU8G	GBU8J	GBU8K	GBU8M	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	8.0						3.2		A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)	$I_{FSM}$	200								A
Maximum DC Forward Voltage at 4.0A DC	$V_F$	1.0								V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0						500		$\mu\text{A}$
$I^2 t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	166								$\text{A}^2\text{S}$
Typical Junction Capacitance per element(Note1)	$C_J$	60								pF
Typical Thermal Resistance (Note2)	$R\theta_{JC}$	2.2								$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ\text{C}$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 100mm x 100mm X 1.6mm Cu Plate Heatsink.

# GBU8A thru GBU8M SERIES

SILICON BRIDGE RECTIFIERS  
GLASS PASSIVATED  
BRIDGE RECTIFIERS



## RATING AND CHARACTERISTICS CURVES GBU8A THRU GBU8M

FIG. 1 - FORWARD CURRENT DERATING CURVE

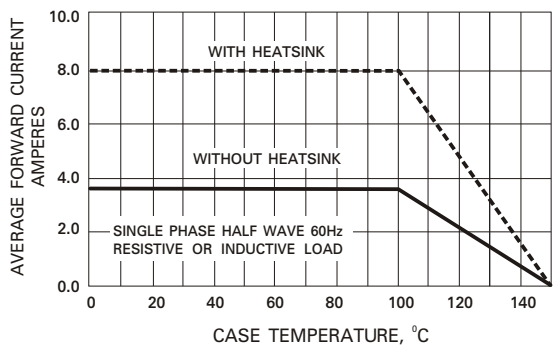


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

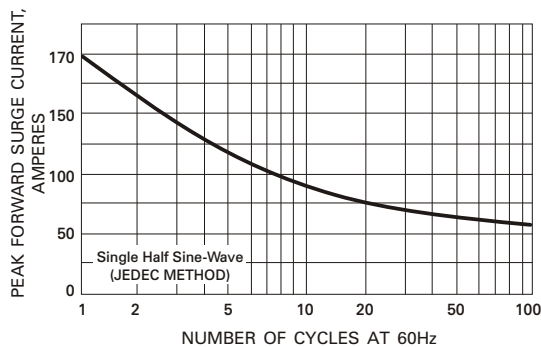


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

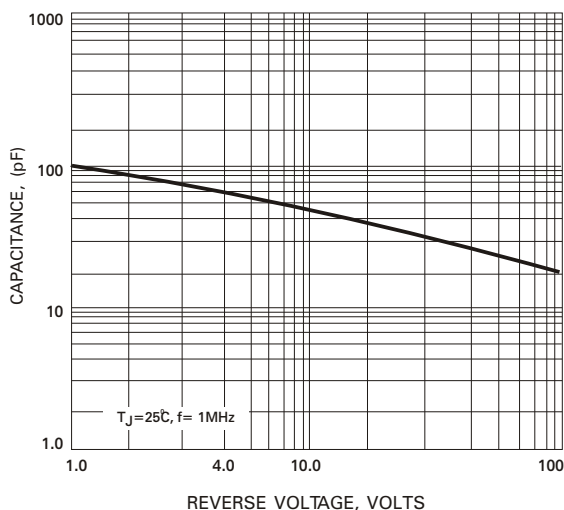


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

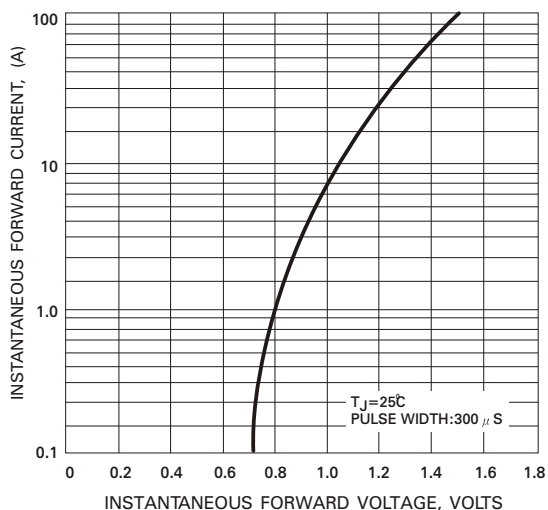


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

