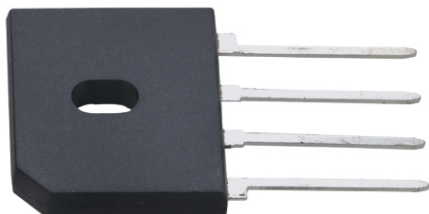


GBU8A thru GBU8M SERIES

SILICON BRIDGE RECTIFIERS
GLASS PASSIVATED
BRIDGE RECTIFIERS



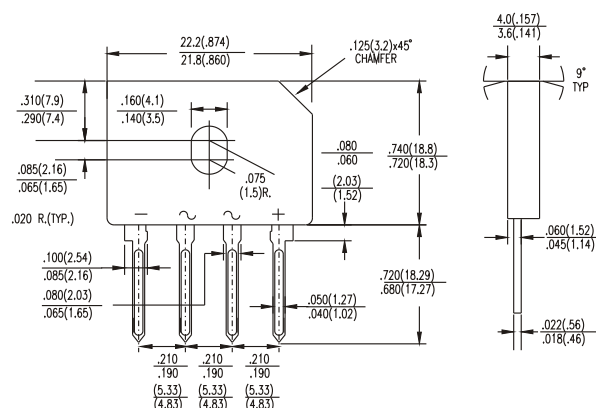
CHENG-YI
ELECTRONIC



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

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



Dimensions in inches and (millimeters)

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		μA
$I^2 t$ Rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	166								A^2S
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

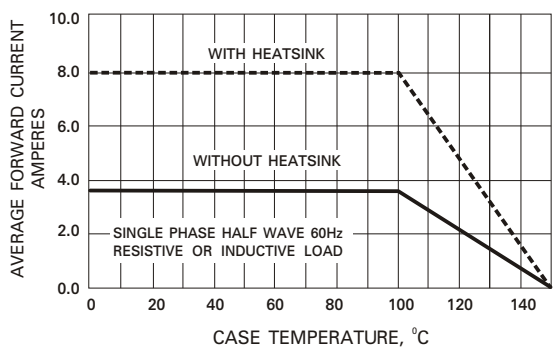


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

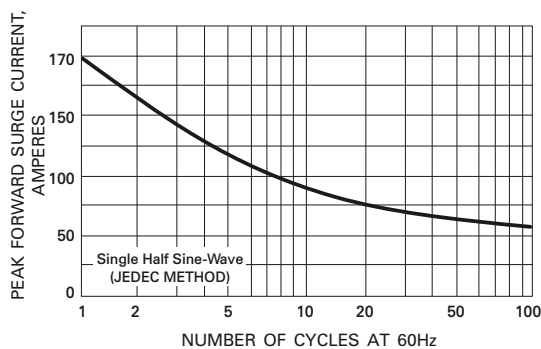


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

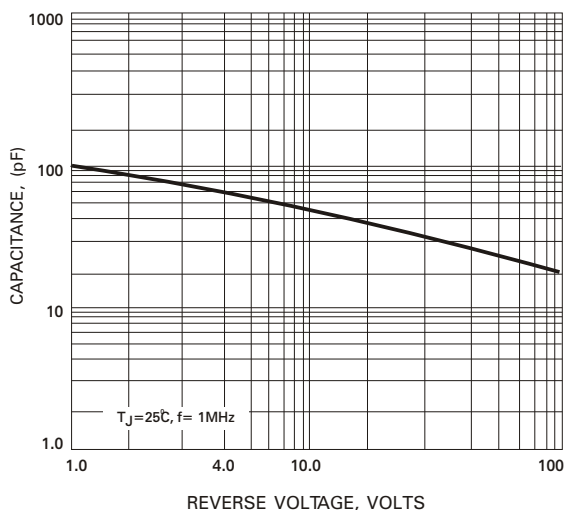


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

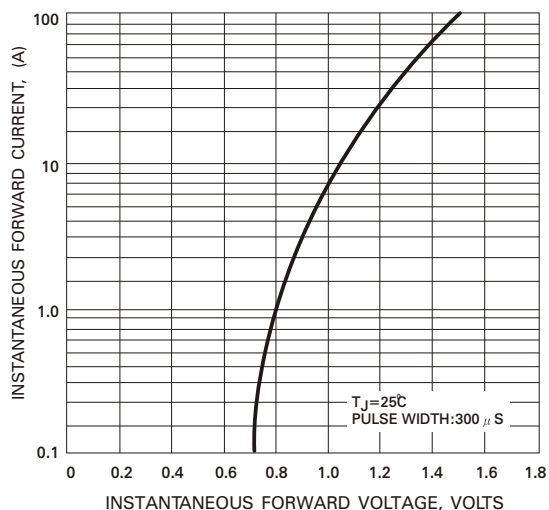


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

