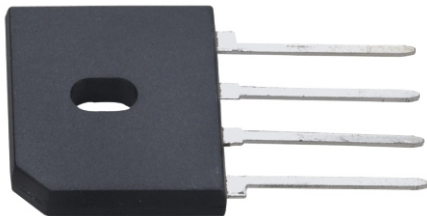


GBU6A thru GBU6M SERIES

SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS



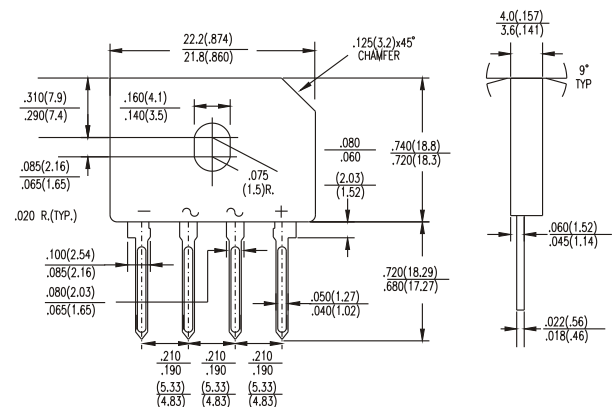
**CHENG-YI
ELECTRONIC**



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-0
- Mounting Position: Any

REVERSE VOLTAGE -50 to 1000 Volts
FORWARD CURRENT -6.0 Amperes



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%.

		GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	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 @ $T_C=100^{\circ}C$ (without heatsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	175							A
Maximum DC Forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ $T_A=25^{\circ}C$ at rated DC Blocking Voltage @ $T_A=125^{\circ}C$	I_R	5.0 500							μA
$I^2 t$ Rating for fusing ($t < 8.3ms$)	$I^2 t$	127							A^2S
Typical Junction Capacitance per element(Note1)	C_J	50							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.2							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 75mm x 75mm X 1.6mm Cu Plate Heatsink.

GBU6A thru GBU6M SERIES

SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS



RATING AND CHARACTERISTICS CURVES GBU6A THRU GBU6M

FIG. 1 - FORWARD CURRENT DERATING CURVE

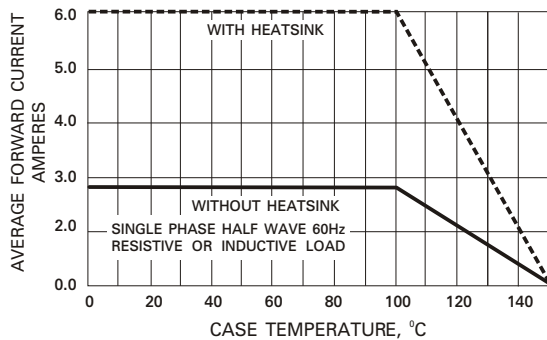


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

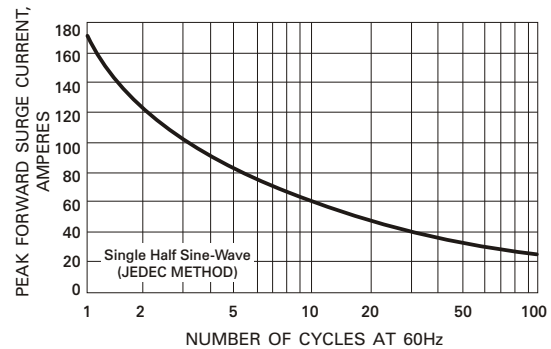


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

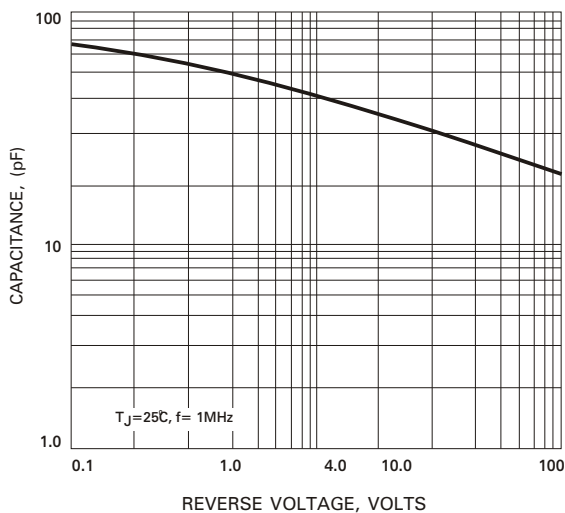


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

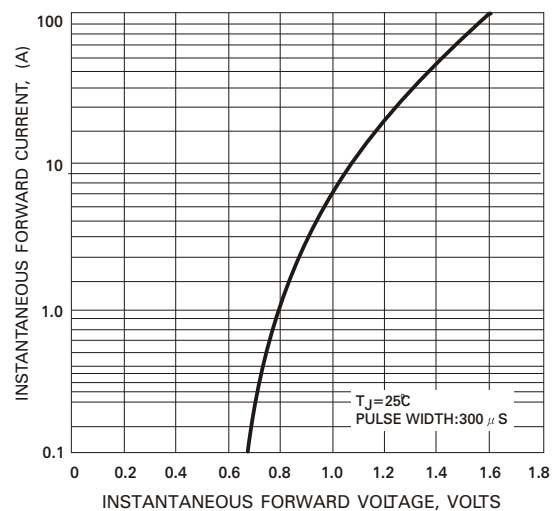


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

