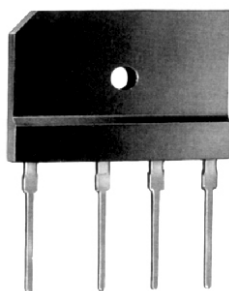


# GBJ/KBJ8A thru GBJ/KBJ8M

## SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS



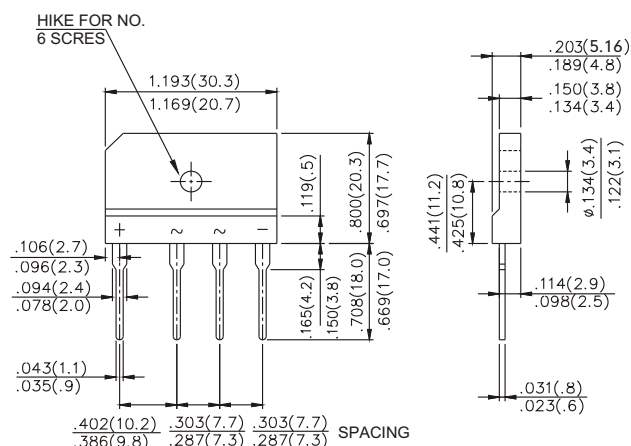
**CHENG-YI  
ELECTRONIC**



### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-O

REVERSE VOLTAGE -50 to 1000 Volts  
FORWARD CURRENT -8.0 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%.

CHARACTERISTICS	SYMBOL	GBJ KBJ 8A	GBJ KBJ 8B	GBJ KBJ 8D	GBJ KBJ 8G	GBJ KBJ 8J	GBJ KBJ 8K	GBJ KBJ 8M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{AV}$	8.0 2.9							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	170							A
Maximum Forward Voltage at 4.0A DC	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
$I^2 t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	120							$\text{A}^2\text{S}$
Typical Junction Capacitance per element (Note 1)	$C_J$	55							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.6							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

NOTES: 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.

# GBJ/KBJ8A thru GBJ/KBJ8M

## SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS



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### RATING AND CHARACTERISTICS CURVES GBJ/KBJ8A THRU GBJ/KBJ8M

FIG. 1 - FORWARD CURRENT DERATING CURVE

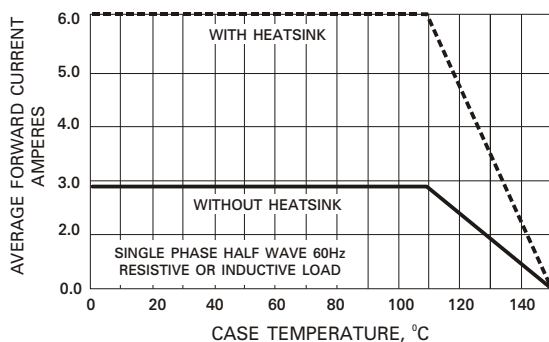


FIG. 2 - MAXIMUM NON-REPETITIVE  
SURGE CURRENT

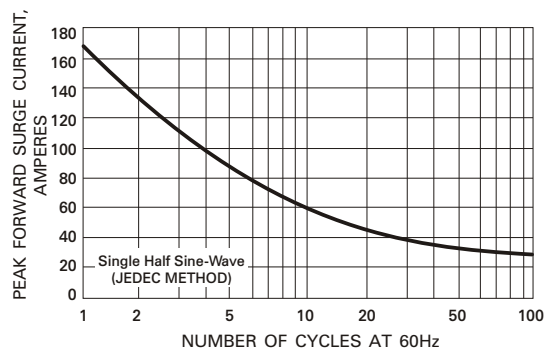


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

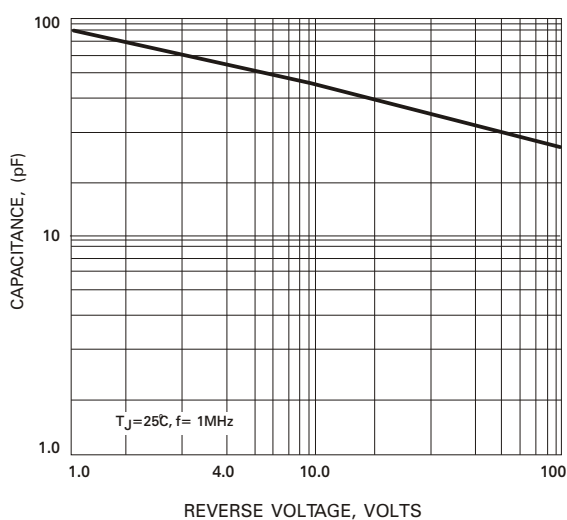


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

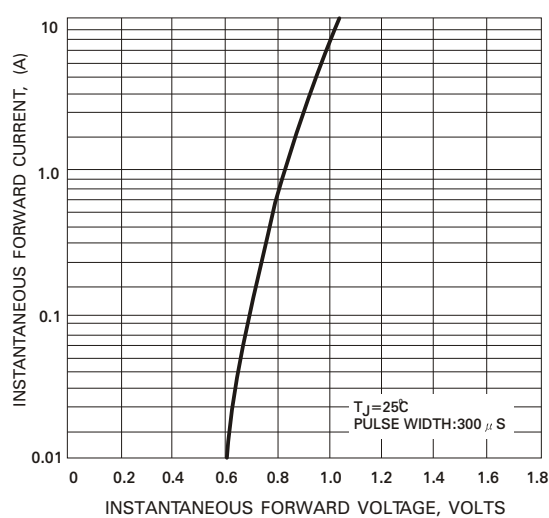


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

