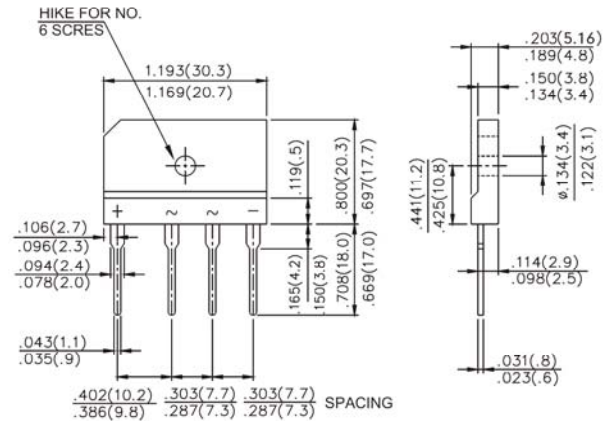


# SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS GBJ/KBJ8A thru GBJ/KBJ8M 50 to 1000 V 8.0 A

## 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

## GBJ / KBJ



## 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	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_c=100^\circ\text{C}$	$V_{(AV)}$	8.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	170							Amp
Maximum DC Forward Voltage at 4.0A DC	$V_F$	1.0							Volts
Maximum DC Reverse Current at rated @ $T_j=25^\circ\text{C}$ DC Blocking Voltage Per Element @ $T_j=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{Amp}$
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	120							$\text{A}^2\text{S}$
Typical Junction Capacitance ( Note 1)	$C_J$	55.0							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.6							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_j$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

### 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.

RATINGS AND CHARACTERISTIC CURVES  
(GBJ/KBJ8A THRU GBJ/KBJ8M)

Fig. 1 - FORWARD CURRENT DERATING CURVE

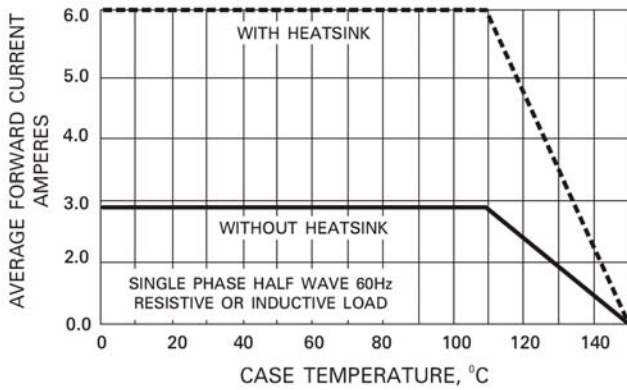


Fig. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

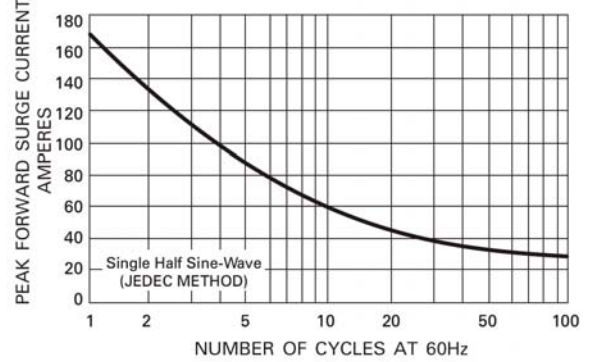


Fig. 3 - TYPICAL JUNCTION CAPACITANCE

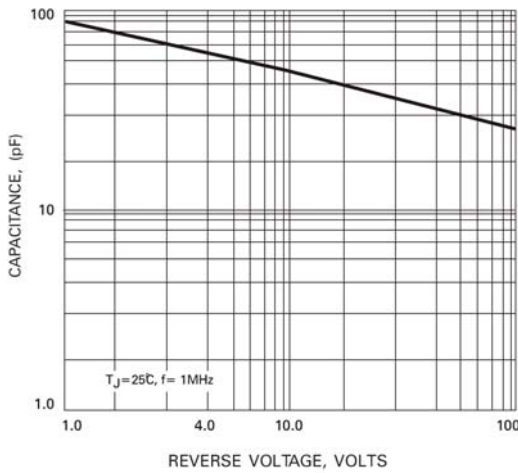


Fig. 4 - TYPICAL FORWARD CHARACTERISTICS

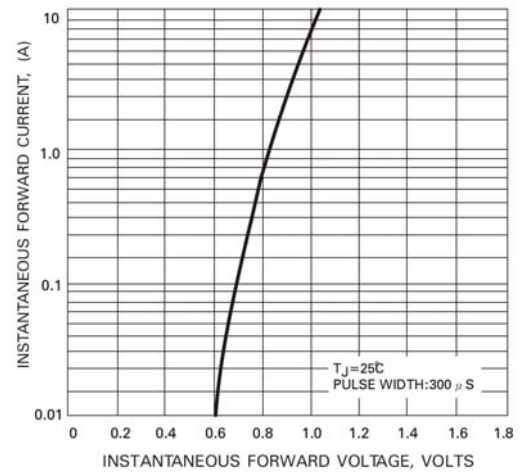


Fig. 5 - TYPICAL REVERSE CHARACTERISTICS

