

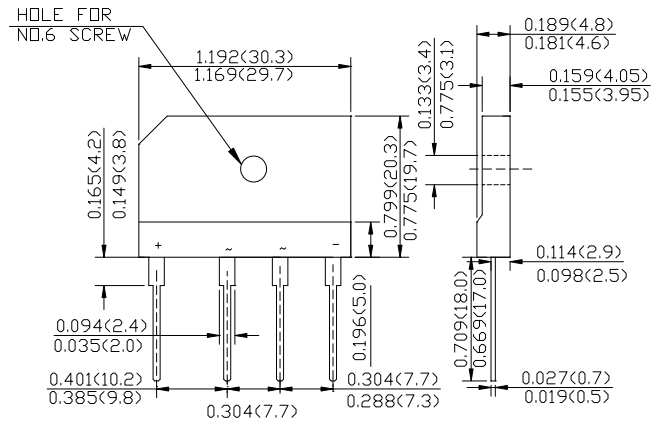
SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS

GBJ/KBJ1001 thru GB /KBJ1007 50 to 1000 V 10.0 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 1001	GBJ KBJ 1002	GBJ KBJ 1003	GBJ KBJ 1004	GBJ KBJ 1005	GBJ KBJ 1006	GBJ KBJ 1007	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 @ $T_c = 110^\circ\text{C}$ (without heatsink)	$V_{(AV)}$	10.0 3							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	200							Amp
Maximum DC Forward Voltage at 5.0A DC	V_F	1.05							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							uAmp
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	120							A^2S
Typical Junction Capacitance (Note 1)	C_J	55							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4							$^\circ\text{C}/\text{W}$
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 150mm x 150mm X 1.6mm Cu Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

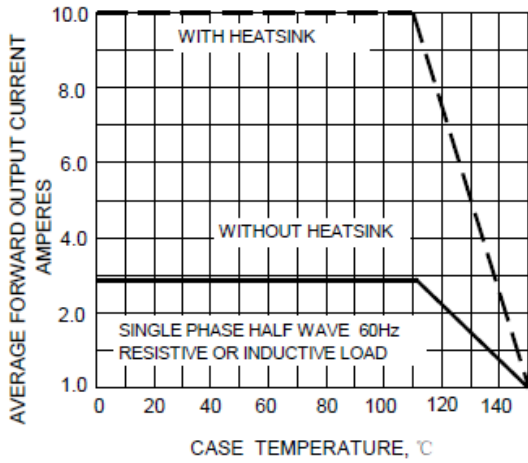


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

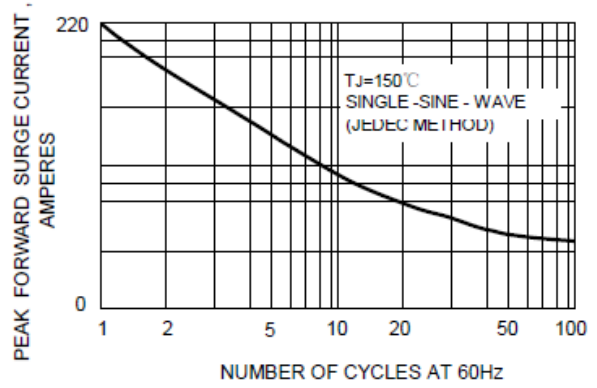


FIG.3-TYPICAL JUNCTION CAPACITANCE

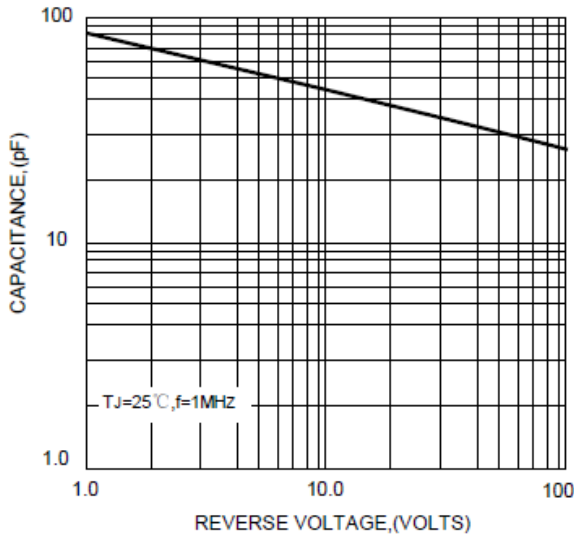


FIG.4-TYPICAL FORWARD CHARACTERISTICS

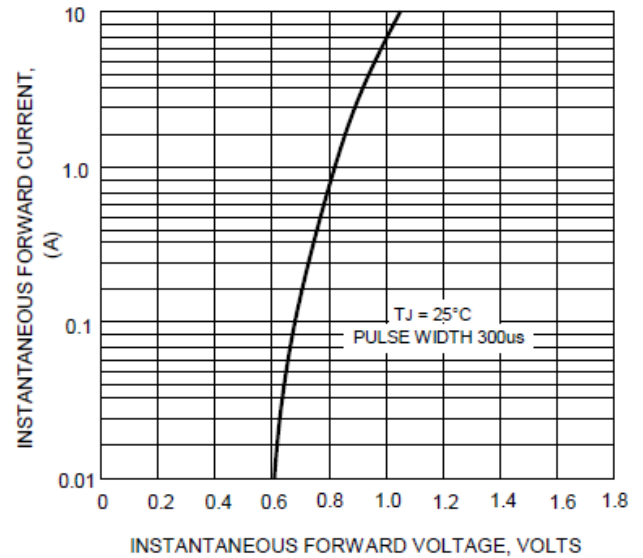


FIG.5-TYPICAL REVERSE CHARACTERISTICS

