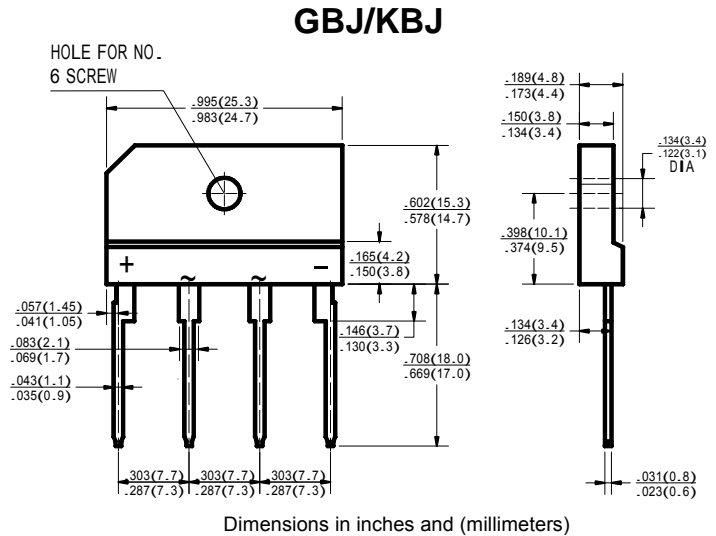


SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS

KBJ6005 thru KBJ610 50 to 1000V 6.0A

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-0



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%.

		KBJ6005	KBJ601	KBJ 602	KBJ604	KBJ 606	KBJ 608	KBJ 610	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 @ $T_C=100^\circ\text{C}$ (without heatsink)	$V_{(AV)}$	6.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	170							Amp
Maximum DC Forward Voltage at 3.0A DC	V_F	1.0							Volts
Maximum DC Reverse Current at rated @ $T_A=25^\circ\text{C}$ DC Blocking Voltage Per Element @ $T_A=125^\circ\text{C}$	I_R	5.0 500							μAmp
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2T	120							A^2S
Typical Junction Capacitance (Note 1)	C_J	55.0							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.8							$^\circ\text{C}/\text{W}$
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 1.0 MHz and applied reverse voltage of 4.0v DC
2. Thermal Resistance Junction to Case

RATINGS AND CHARACTERISTIC CURVES
(GBJ/KBJ6A THRU GBJ/KBJ6M)

Fig. 1 - FORWARD CURRENT DERATING CURVE

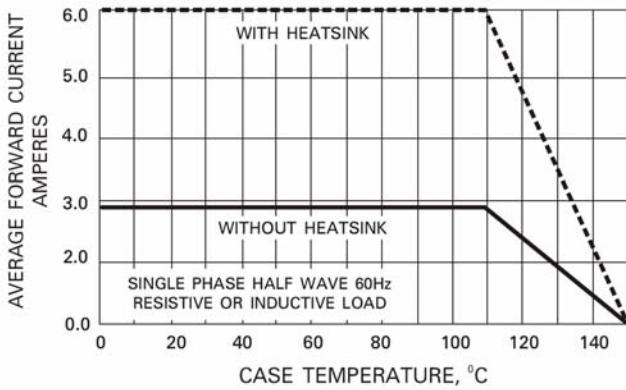


Fig. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

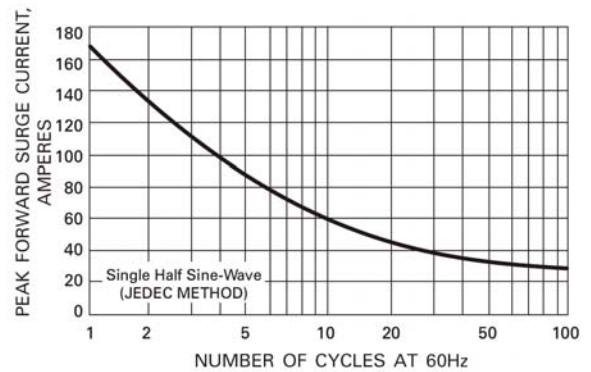


Fig. 3 - TYPICAL JUNCTION CAPACITANCE

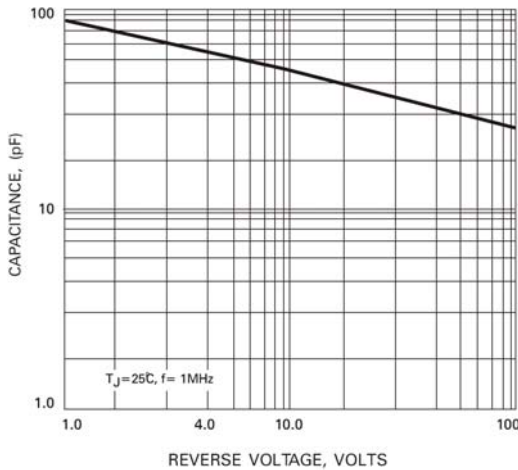


Fig. 4 - TYPICAL FORWARD CHARACTERISTICS

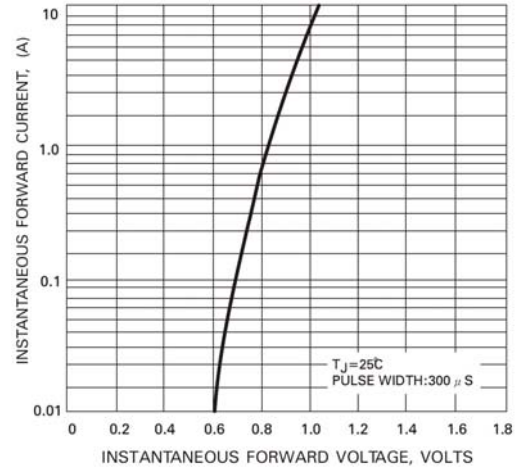


Fig. 5 - TYPICAL REVERSE CHARACTERISTICS

