KBJ6005 thru KBJ610

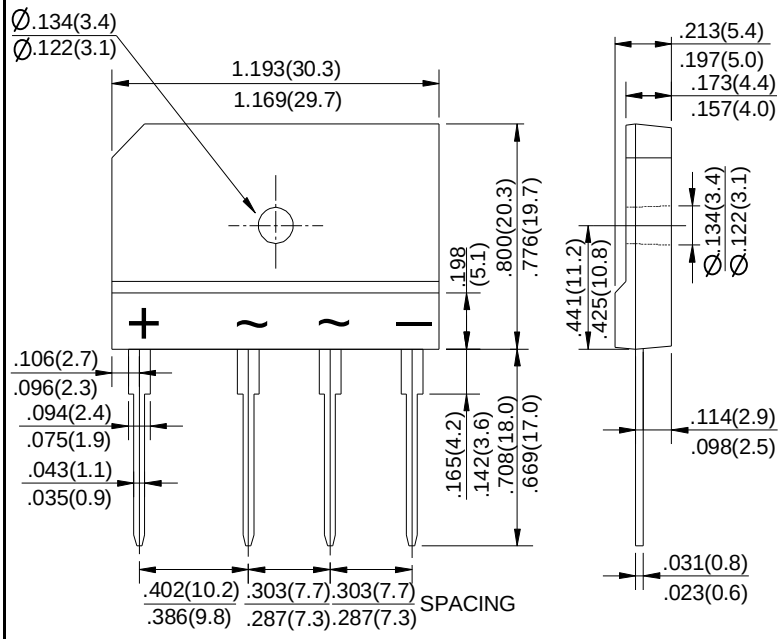
SILICON BRIDGE RECTIFIERS

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

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 U/L flammability classification 94V-0

KBJ



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

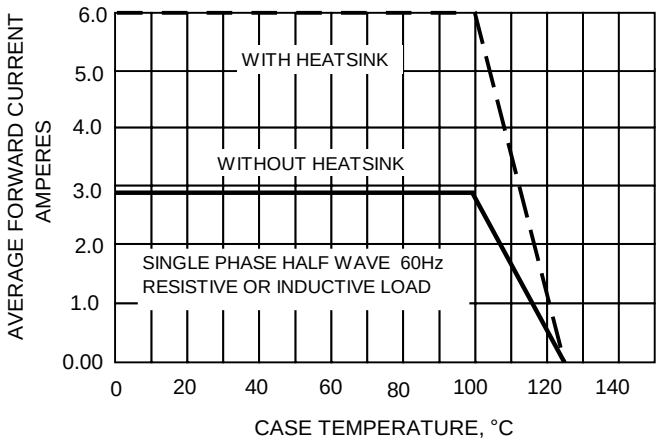
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	30	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 Note 2) Rectified Current @ T_C=100℃ (without heatsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	175							A
Maximum Forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_J=25℃ at Rated DC Blocking Voltage @ T_J=125℃	I_R	10 500							uA
I^2t Rating for Fusing (t<8.3ms)	I^2t	120							A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	55							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	1.8							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE



FLG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

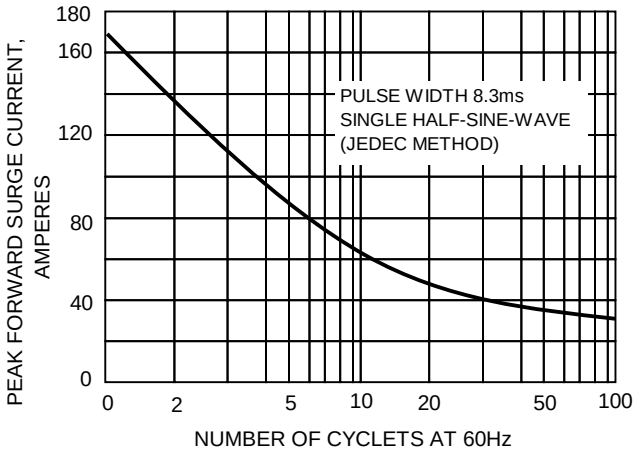


FIG.3-TYPICAL JUNCTION CAPACITANCE

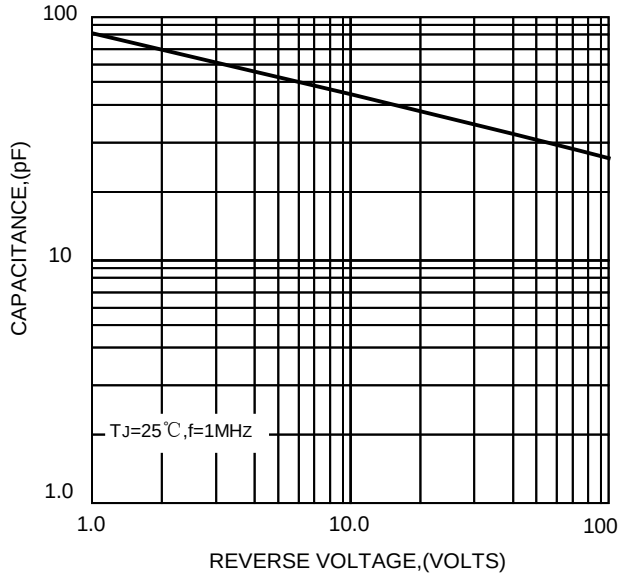


FIG.4-TYPICAL FORWARD CHARACTERISTICS

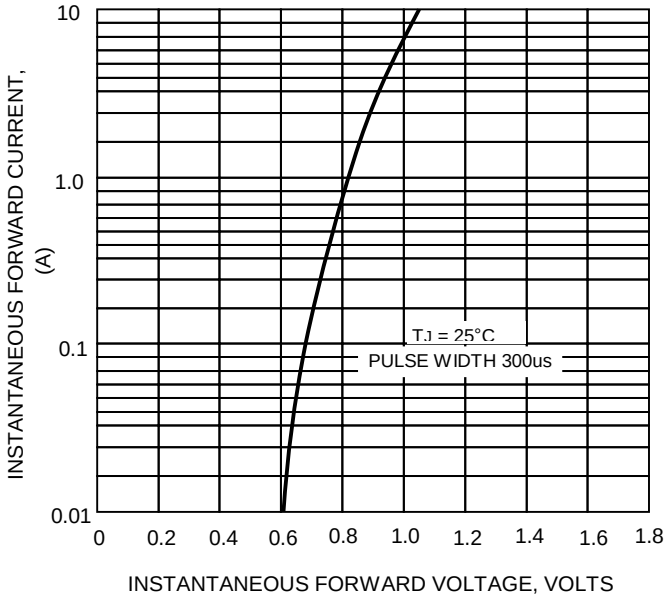


FIG.5-TYPICAL REVERSE CHARACTERISTICS