

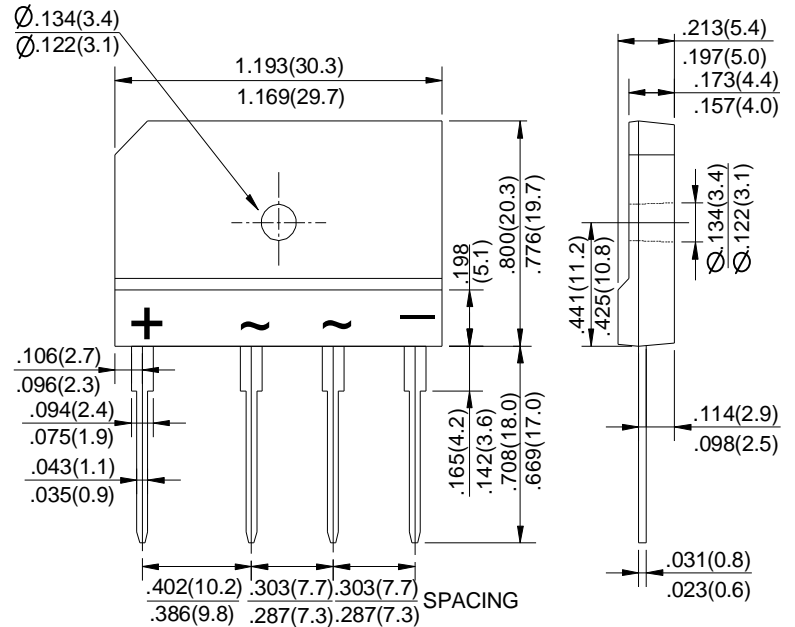
KBJ6005-KBJ610

Silicon Bridge Rectifiers

REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 6.0 Amperes

KBJ



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	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 Rectified Current (with heatsink Note 2) @ T _c =100°C (without heatsink)	I _(AV)	6.0						2.8		A
Peak Forward Surge 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 at Rated DC Blocking Voltage @ T _J =25°C @ T _J =125°C	I _R	10						500		uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	120								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	55								pF
Typical Thermal Resistance (Note2)	R _{θJC}	1.8								°C/W
Operating Temperature Range	T _J	-55 to +125								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

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.

Ratings AND Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

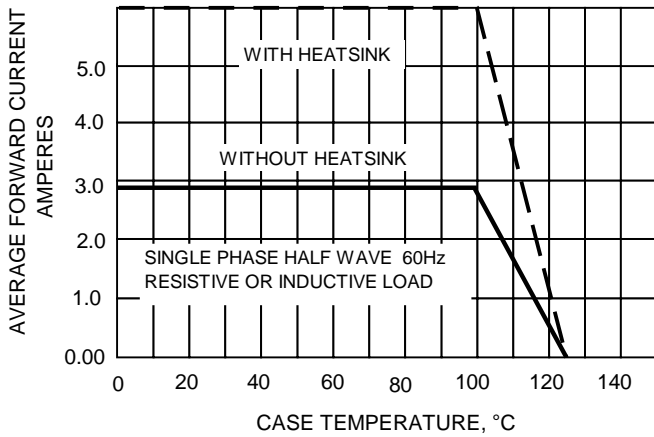


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

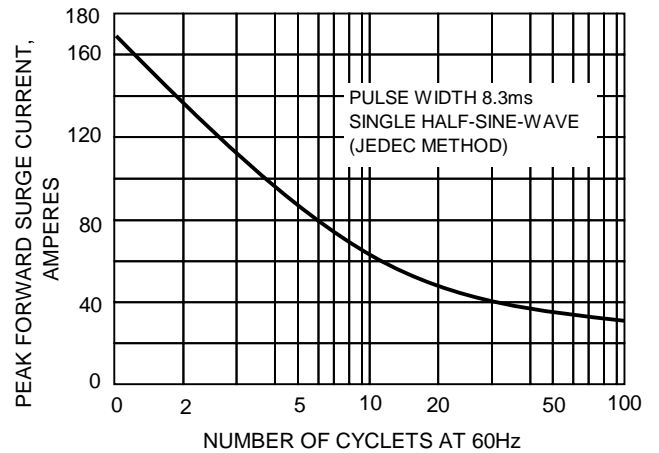


FIG.3-TYPICAL JUNCTION CAPACITANCE

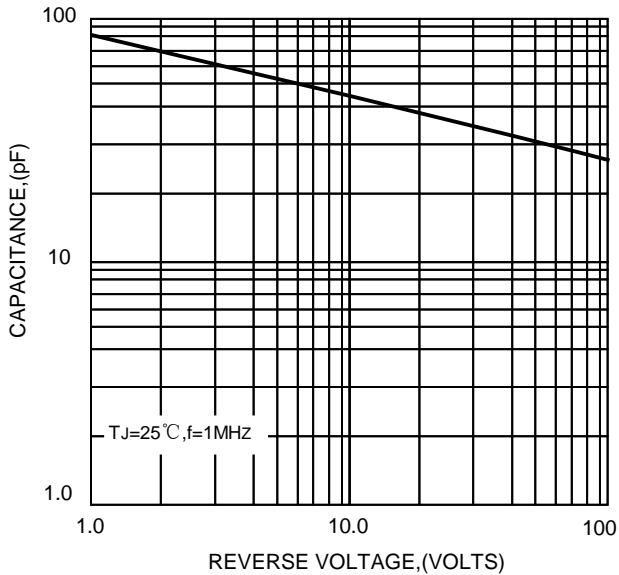


FIG.4-TYPICAL FORWARD CHARACTERISTICS

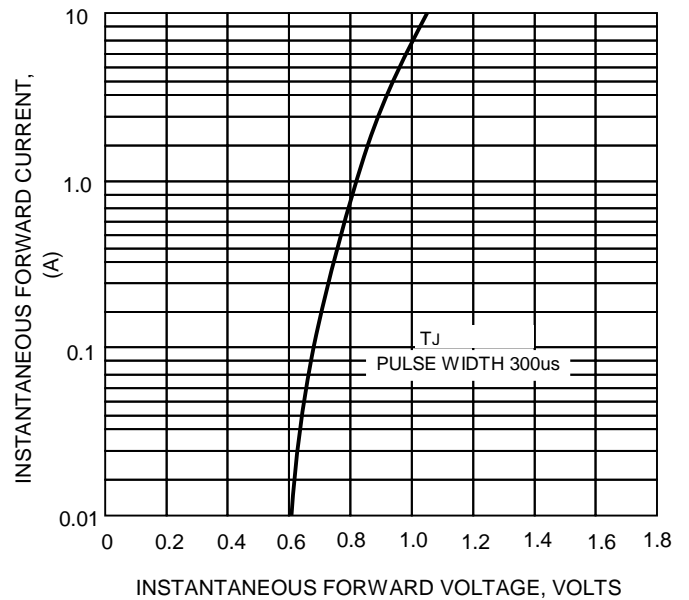


FIG.5-TYPICAL REVERSE CHARACTERISTICS

