



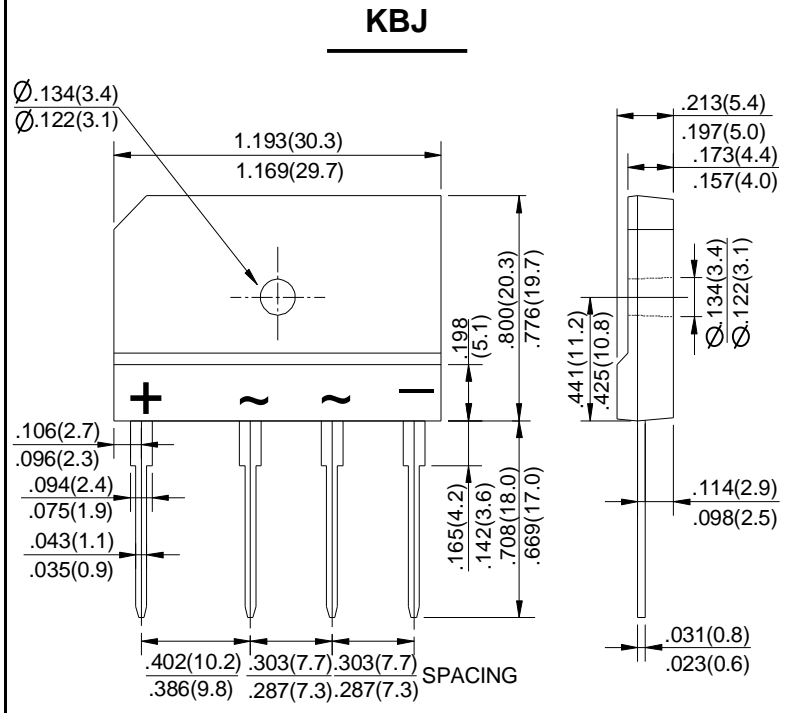
SILICON BRIDGE RECTIFIERS

KBJ6005 thru KBJ610

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



Dimensions in inches and (millimeters)

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 (with heatsink Note 2) Rectified Current @ T _C =100°C (without heatsink)	I _(AV)					6.0				A
						2.8				
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 @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R					10				uA
						500				
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.



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FIG.1-FORWARD CURRENT DERATING CURVE

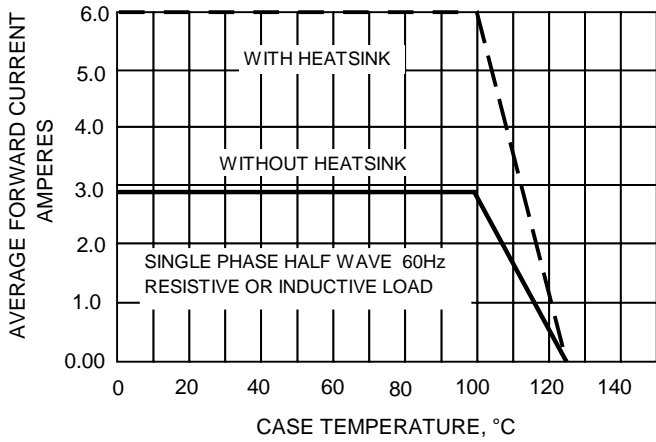


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

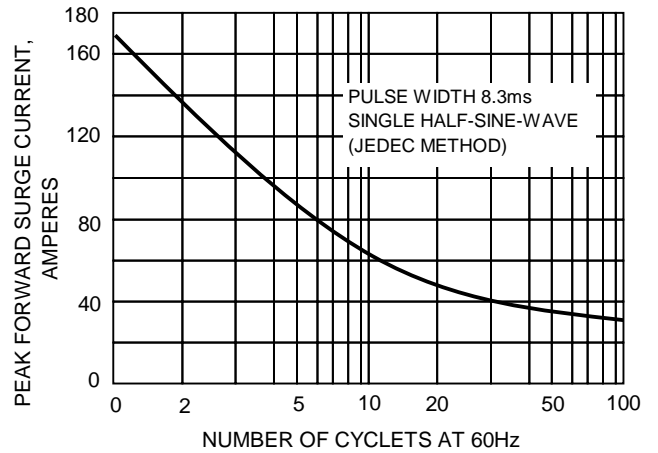


FIG.3-TYPICAL JUNCTION CAPACITANCE

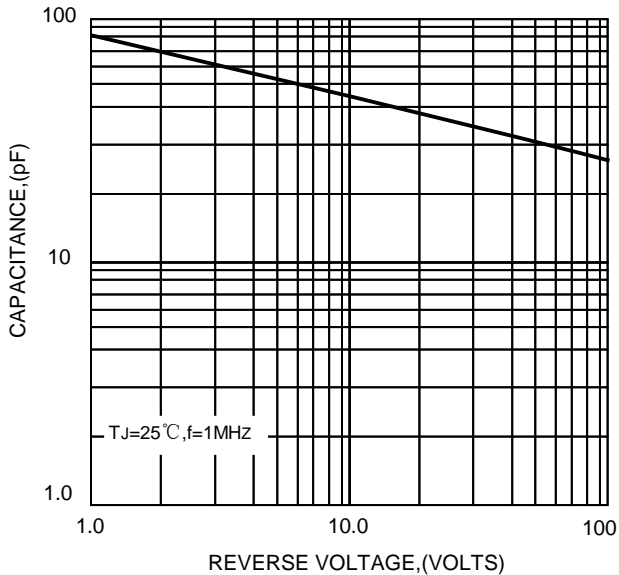


FIG.4-TYPICAL FORWARD CHARACTERISTICS

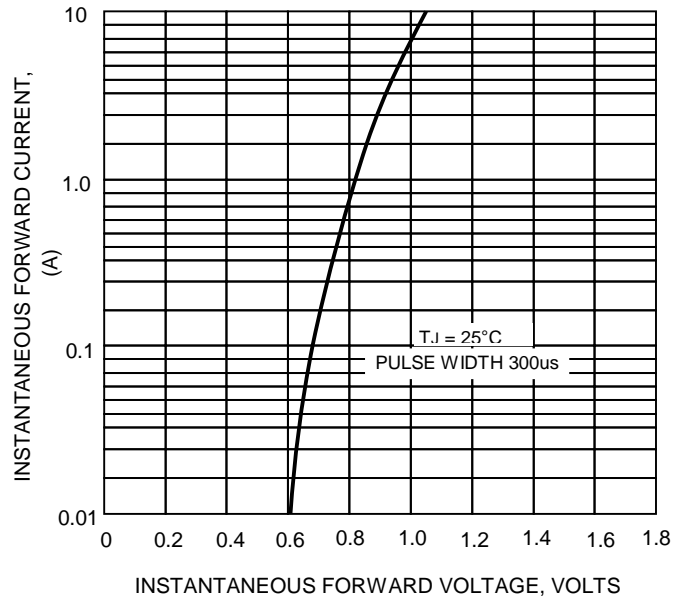


FIG.5-TYPICAL REVERSE CHARACTERISTICS

