

<b>SILICON BRIDGE RECTIFIERS</b>	<b>REVERSE VOLTAGE - 50 to 1000Volts</b> <b>FORWARD CURRENT - 6.0 Amperes</b>
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Rating to 1000V PRV</li> <li>● Ideal for printed circuit board</li> <li>● Low forward voltage drop, high current capability</li> <li>● Reliable low cost construction utilizing molded plastic technique results in inexpensive product</li> <li>● The plastic material has U/L flammability classification 94V-0</li> </ul>	<div style="text-align: center; border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>KBJ</b> </div> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

**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	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	30	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current (with heatsink Note 2) @ Tc=100°C (without heatsink)	I(AV)	6.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	IFSM					175				A
Maximum Forward Voltage at 3.0A DC	VF					1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ Tj=25°C @ Tj=125°C	IR					10				uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t					120				A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	CJ					55				pF
Typical Thermal Resistance (Note2)	RθJC					1.8				°C/W
Operating Temperature Range	TJ					-55 to +125			°C	
Storage Temperature Range	TSTG					-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.

FIG.1-FORWARD CURRENT DERATING CURVE

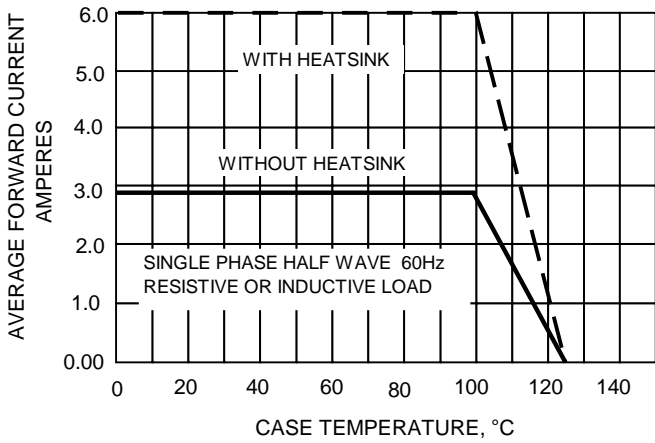


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

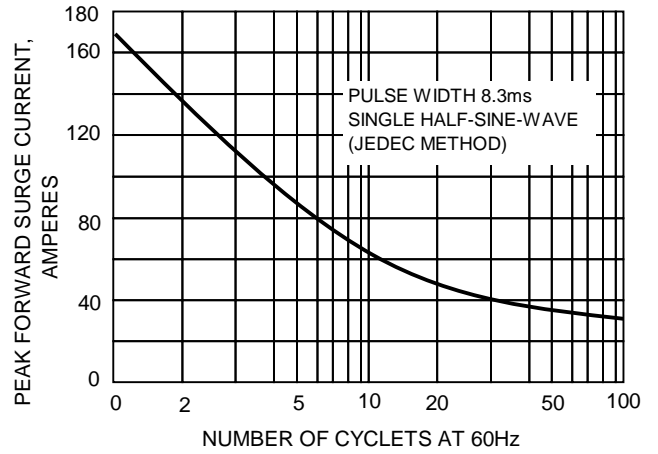


FIG.3-TYPICAL JUNCTION CAPACITANCE

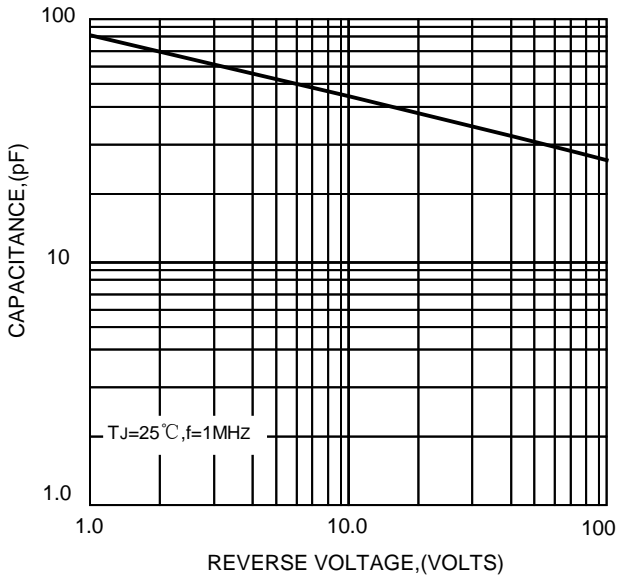


FIG.4-TYPICAL FORWARD CHARACTERISTICS

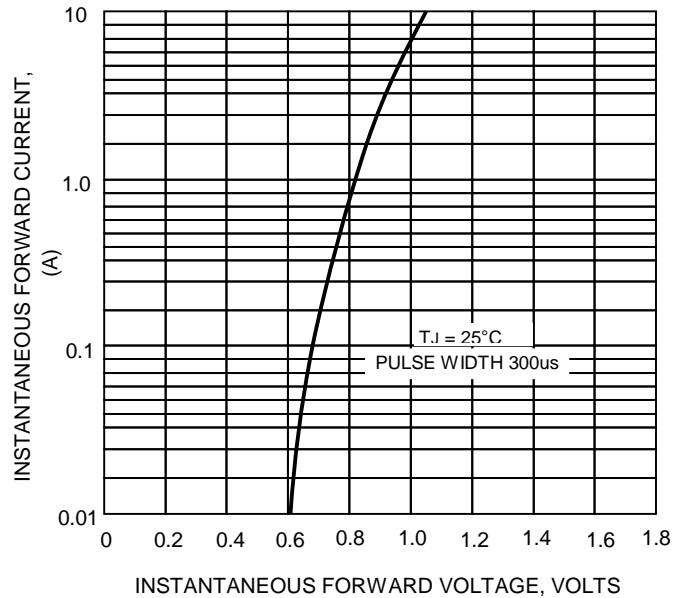


FIG.5-TYPICAL REVERSE CHARACTERISTICS

