

SILICON BRIDGE RECTIFIERS	<p style="text-align: right;"> REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 25 Amperes </p> <p style="text-align: center; border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">KBJ</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
<p>FEATURES</p> <ul style="list-style-type: none"> ● 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

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	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510	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 @ T _c =100°C (without heatsink)	I _(AV)	25.0							4.2	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	400								A
Maximum Forward Voltage at 12.5A DC	V _F	1.1								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	510								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	85								pF
Typical Thermal Resistance (Note2)	R _{θJC}	0.6								°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 300mm*300mm*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

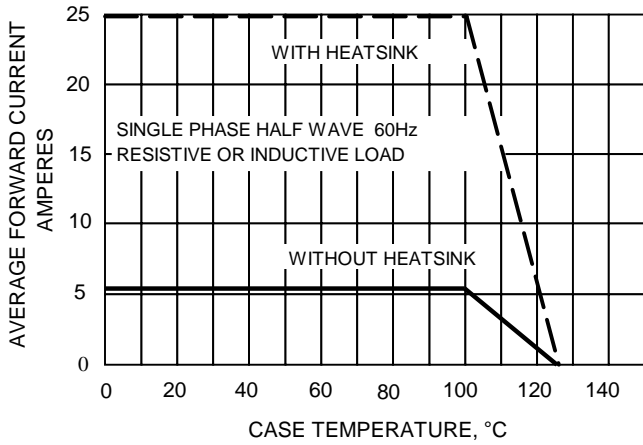


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

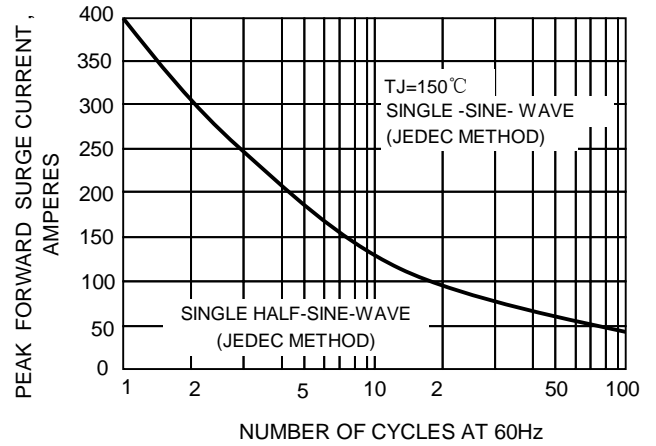


FIG.3-TYPICAL JUNCTION CAPACITANCE

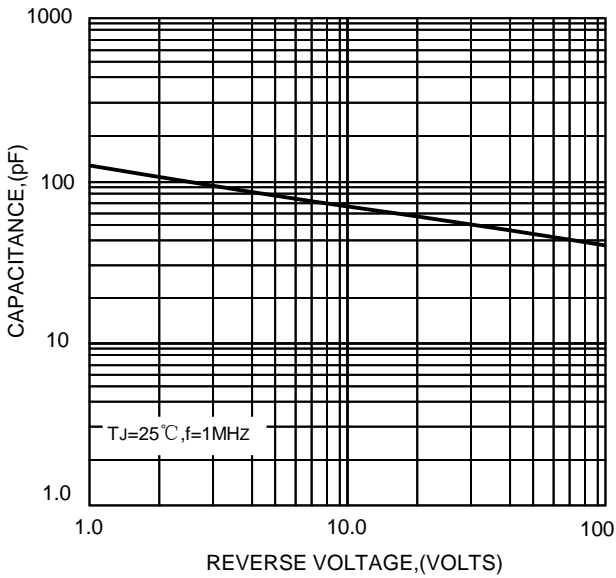


FIG.4-TYPICAL FORWARD CHARACTERISTICS

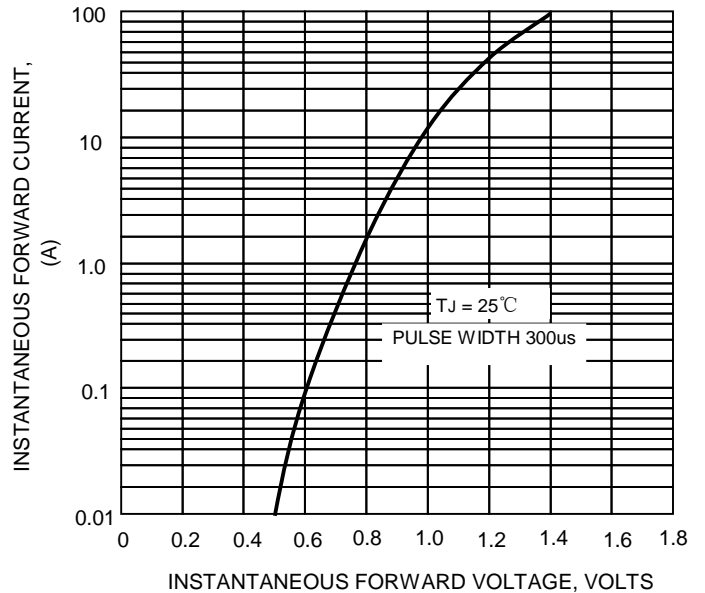


FIG.5-TYPICAL REVERSE CHARACTERISTICS

