

Single Phase Glass Passivated Silicon Bridge Rectifier

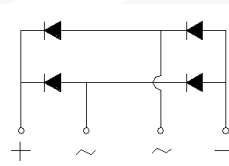
$V_{RRM} = 600\text{ V} - 1000\text{ V}$

$I_O = 25\text{ A}$

Features

- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Reliable, low cost construction utilizing molded
- Types from 600 V to 1000 V V_{RRM}
- Not ESD Sensitive

KBJ Package



Maximum ratings at $T_a = 25\text{ }^{\circ}\text{C}$ (ambient temperature), unless otherwise specified

Parameter	Symbol	Conditions	KBJ2506G	KBJ2508G	KBJ2510G	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-55 to 125	-55 to 125	-55 to 125	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^{\circ}\text{C}$

Electrical characteristics at $T_a = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load
For capacitive load derate current by 20%

Parameter	Symbol	Conditions	KBJ2506G	KBJ2508G	KBJ2510G	Unit
Maximum average forward rectified current	I_O	$T_c = 110\text{ }^{\circ}\text{C}$	25	25	25	A
		$T_a = 25\text{ }^{\circ}\text{C}$	4.2	4.2	4.2	
Peak forward surge current	I_{FSM}	8.3 ms single sine-wave	350	350	350	A
Maximum instantaneous forward voltage per leg	V_F	$I_F = 12.5\text{ A}$	1.05	1.05	1.05	V
Maximum reverse current at rated DC blocking voltage per leg	I_R	$T_a = 25\text{ }^{\circ}\text{C}$	10	10	10	μA
		$T_a = 125\text{ }^{\circ}\text{C}$	500	500	500	

FIG. 1 - FORWARD CURRENT DERATING CURVE

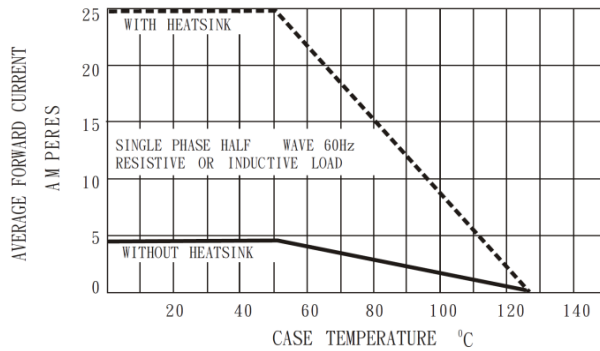


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

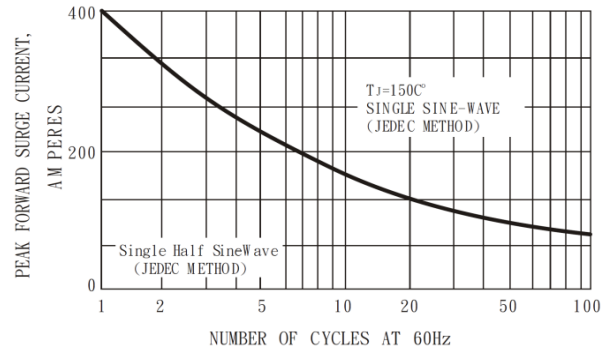


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

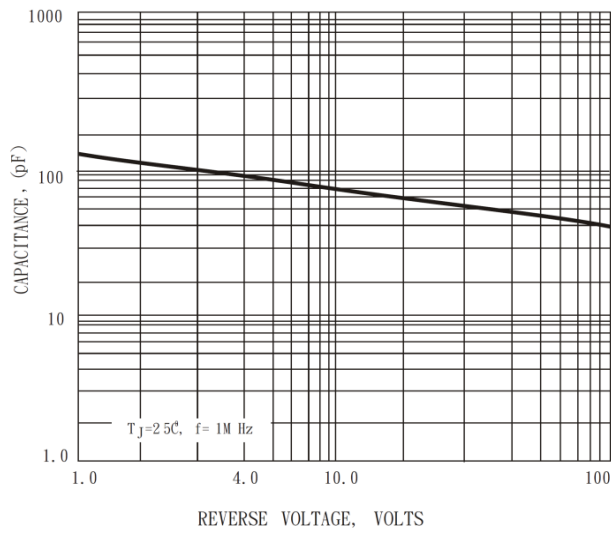


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

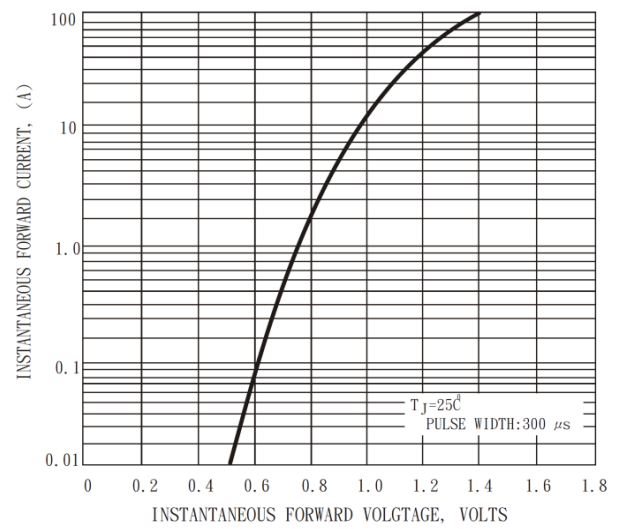
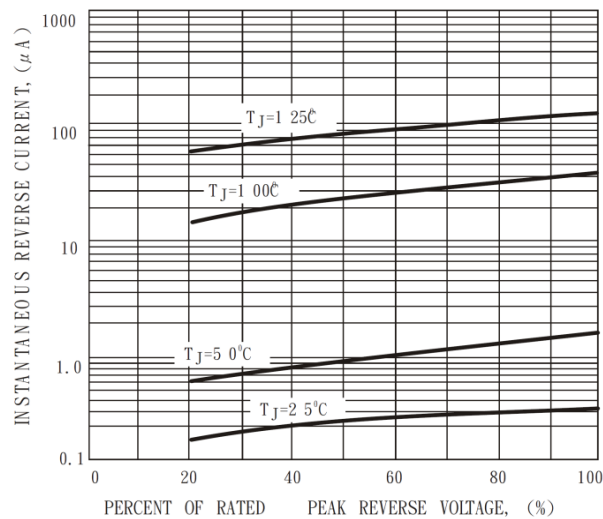
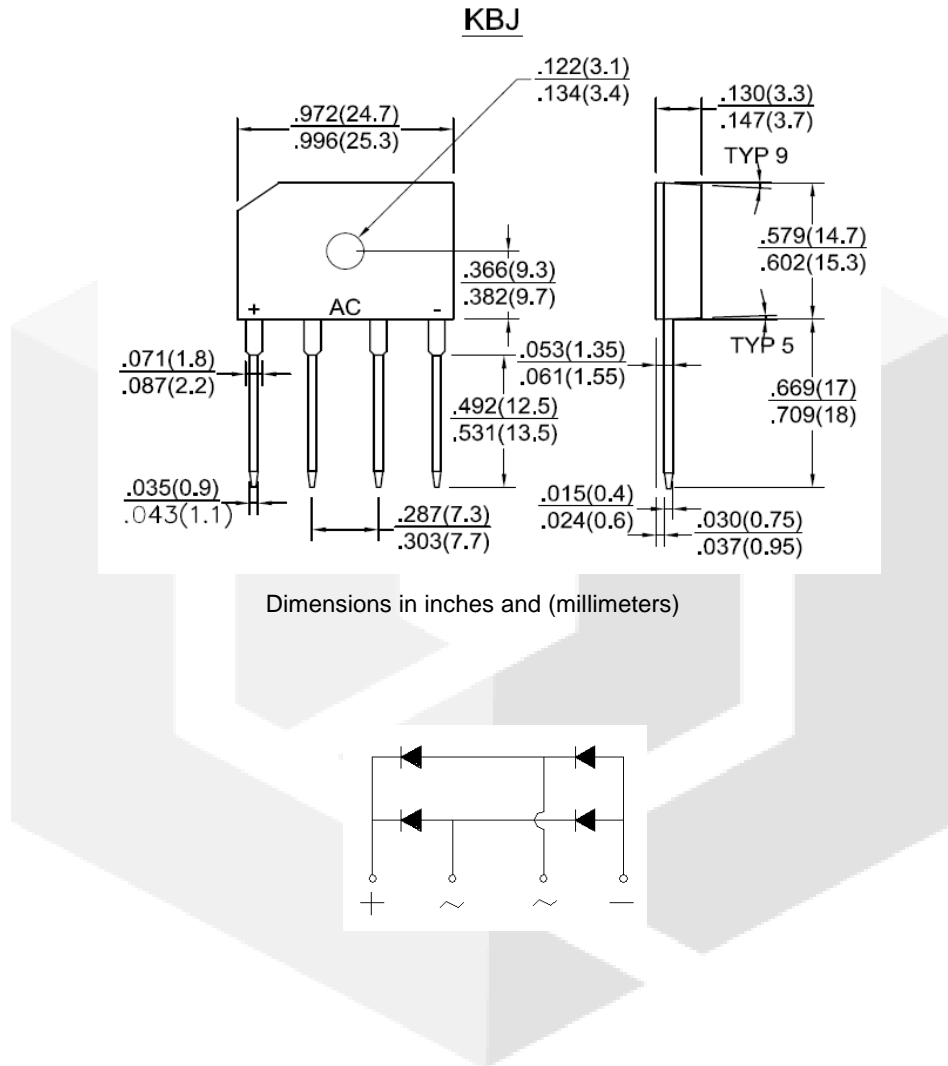


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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