

## Single Phase Glass Passivated Silicon Bridge Rectifier

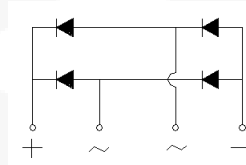
$V_{RRM} = 50\text{ V} - 400\text{ V}$

$I_o = 25\text{ A}$

### 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 plastic technique
- Types from 50 V to 400 V  $V_{RRM}$
- Not ESD Sensitive

KBJ Package



### Maximum ratings at $T_j = 25\text{ }^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Conditions	KBJ25005G	KBJ2501G	KBJ2502G	KBJ2504G	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	400	V
RMS reverse voltage	$V_{RMS}$		35	70	140	280	V
DC blocking voltage	$V_{DC}$		50	100	200	400	V
Operating temperature	$T_j$		-55 to 125	-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	-55 to 150	$^\circ\text{C}$

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

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

Parameter	Symbol	Conditions	KBJ25005G	KBJ2501G	KBJ2502G	KBJ2504G	Unit
Maximum average forward rectified current	$I_o$	$T_c = 110\text{ }^\circ\text{C}$	25	25	25	25	A
		$T_a = 25\text{ }^\circ\text{C}$	4.2	4.2	4.2	4.2	
Peak forward surge current	$I_{FSM}$	8.3 ms single sine-wave	350	350	350	350	A
Maximum instantaneous forward voltage per leg	$V_F$	$I_F = 12.5\text{ A}$	1.05	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	10	$\mu\text{A}$
		$T_a = 125\text{ }^\circ\text{C}$	500	500	500	500	

FIG. 1 - FORWARD CURRENT DERATING CURVE

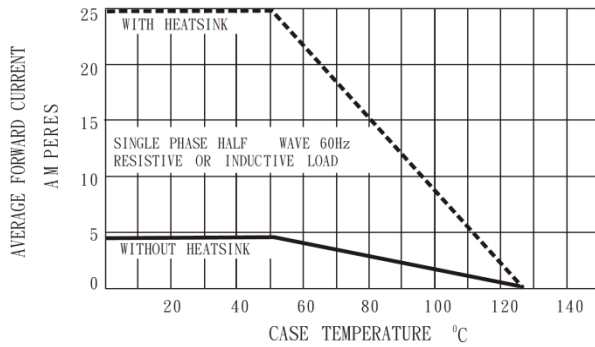


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

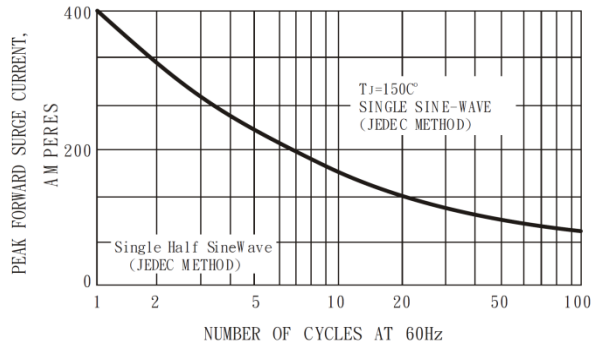


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

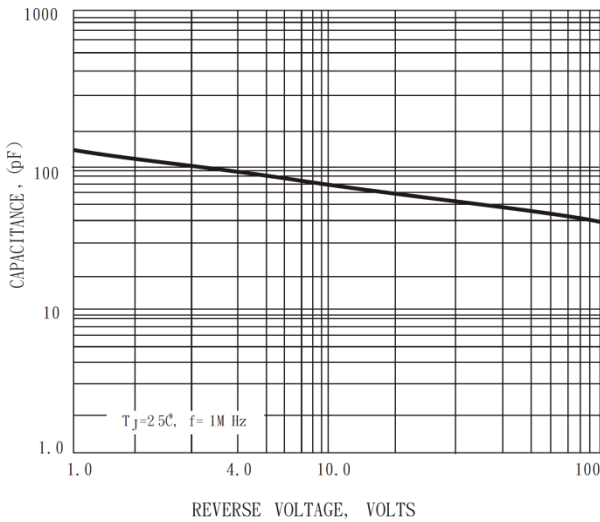


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

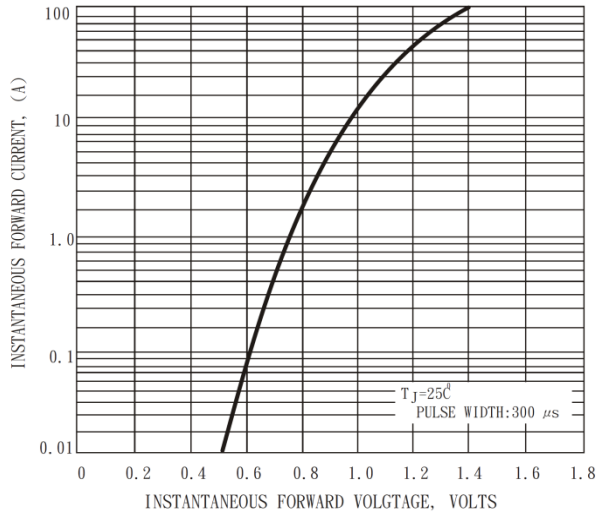
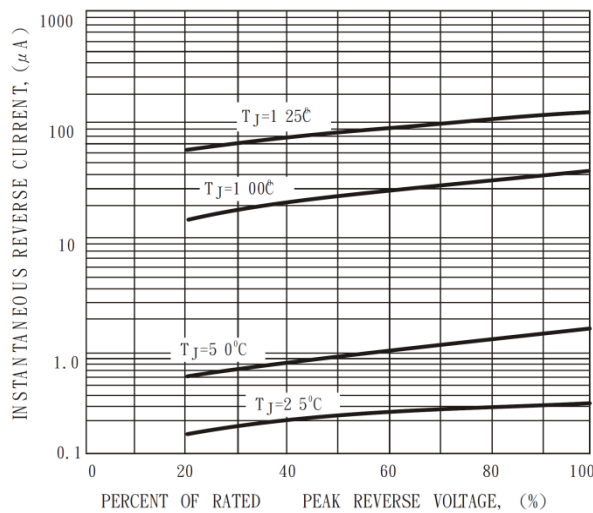


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS



**Package dimensions and terminal configuration**

Product is marked with part number and terminal configuration.

