

## KBJ4005G thru KBJ404G

# Single Phase Glass Passivated Silicon Bridge Rectifier

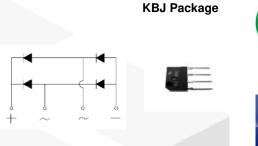
 $V_{RRM} = 50 V - 400 V$  $I_0 = 4 A$ 

#### Features

- Ideal for printed circuit board
- Reliable low cost construction
- · Plastic material has Underwriters Laboratory
- Flammability Classification 94V-0
- Surge overload rating to 120 Amperes peak
- Types from 50 V to 400 V  $\mathrm{V}_{\mathrm{RRM}}$
- Not ESD Sensitive

#### **Mechanical Data**

Case: Molded plastic Weight: 0.15 ounce, 4.0 grams Mounting torque: 5 inch-lb max





#### Maximum ratings at T<sub>i</sub> = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	KBJ4005G	KBJ401G	KBJ402G	KBJ404G	Unit
Repetitive peak reverse ve	oltage V <sub>RRM</sub>		50	100	200	400	V
RMS reverse voltage	V <sub>RMS</sub>		35	70	140	280	V
DC blocking voltage	V <sub>DC</sub>		50	100	200	400	V
Operating temperature	Tj		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T <sub>stg</sub>		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

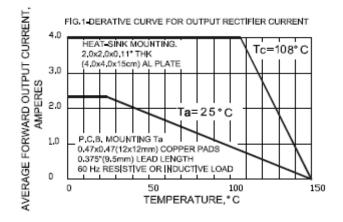
#### Electrical characteristics at Tj = 25 °C, unless otherwise specified

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

Parameter	Symbol	Conditions	KBJ4005G	KBJ401G	KBJ402G	KBJ404G	Unit
Maximum average forward rectified current	Ι <sub>Ο</sub>	T <sub>c</sub> = 108 °C	4	4	4	4	Α
		$T_a = 25 \ ^{\circ}C$	2.3	2.3	2.3	2.3	
Peak forward surge current	I <sub>FSM</sub>	8.3 ms single sine-wave	120	120	120	120	А
Maximum instantaneous forward voltage per leg	V <sub>F</sub>	$I_F = 4 A$	1.1	1.1	1.1	1.1	V
Maximum reverse current at rated DC blocking voltage per leg	I <sub>R</sub>	T <sub>a</sub> = 25 °C	5	5	5	5	μA
		T <sub>a</sub> = 125 °C	500	500	500	500	



## KBJ4005G thru KBJ404G



FIG, 2 - MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG PEAK FORWARD SURGE CURRENT 150 T.=25°C SINGLE HALF SINE-WAVE (JEDEC Method) 100 AMPERES 50 0 1 10 100 NUMBER OF CYCLES AT 60 Hz

FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG 100 INSTANTANEOUS FORWARD CURRENT, AMPERES 10 T.=25\*C PULSE WIDTH=300 µ 8 1 0,1 .01 0.4 0.6 0.8 1.0 1.2 1.4 1.6 INSTANTANEOUS FORWARD VOLTAGE, VOLTS

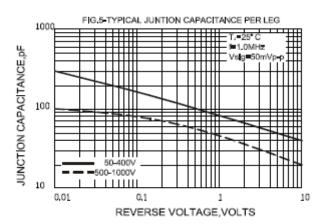
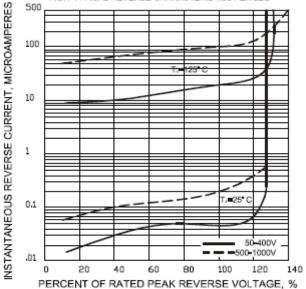
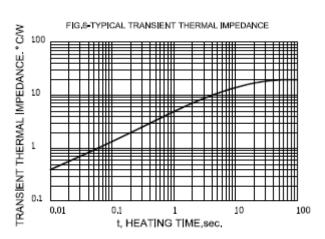


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG 500





Oct. 2018



### Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

