Single Phase Glass Passivated Silicon Bridge Rectifier

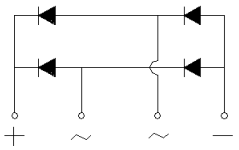
V_{RRM} = 50 V - 400 V

I_O = 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 V_{RRM}
- Not ESD Sensitive

KBJ Package



Mechanical Data

Case: Molded plastic

Weight: 0.15 ounce, 4.0 grams

Mounting torque: 5 inch-lb max

Maximum ratings at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	KBJ4005G	KBJ401G	KBJ402G	KBJ404G	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 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-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	I_O	T_c = 108 °C T_a = 25 °C	4 2.3	4 2.3	4 2.3	4 2.3	A
Peak forward surge current	I_{FSM}	8.3 ms single sine-wave	120	120	120	120	A
Maximum instantaneous forward voltage per leg	V_F	I_F = 4 A	1.1	1.1	1.1	1.1	V
Maximum reverse current at rated DC blocking voltage per leg	I_R	T_a = 25 °C T_a = 125 °C	5 500	5 500	5 500	5 500	µA

FIG.1-DERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT

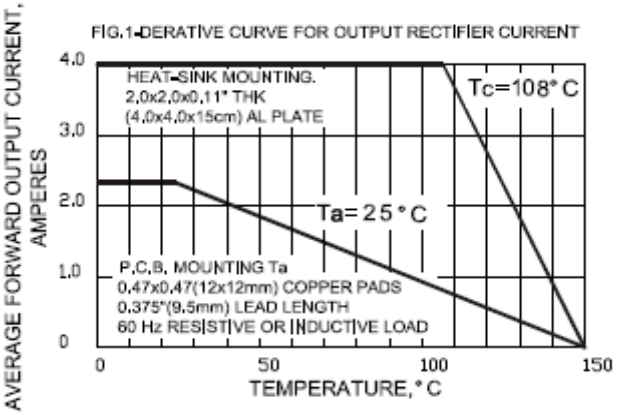


FIG. 2 - MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

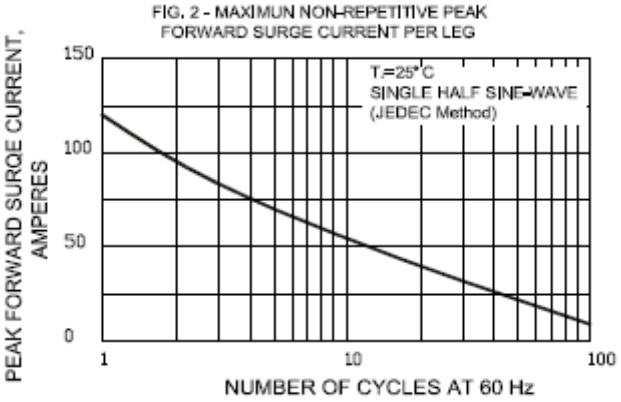


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

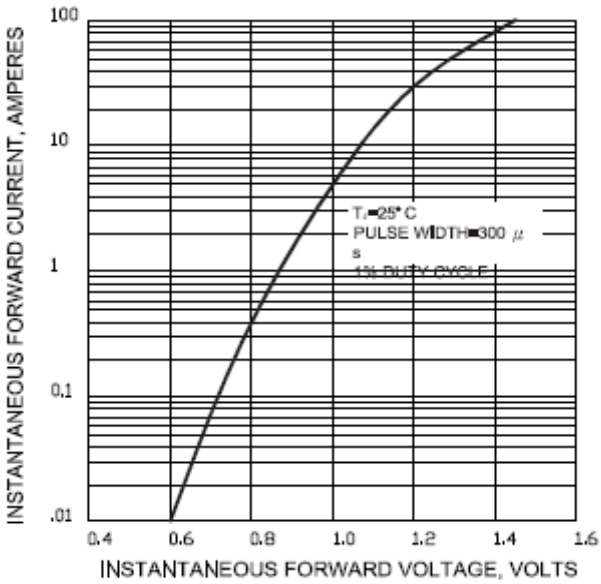


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

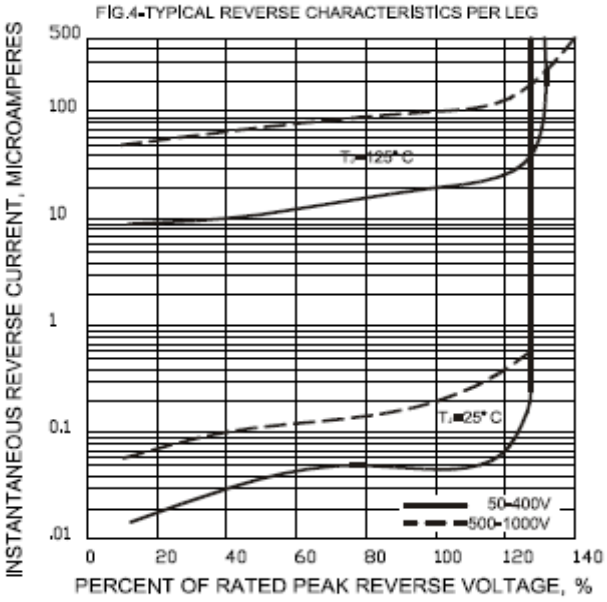


FIG.5-TYPICAL JUNTION CAPACITANCE PER LEG

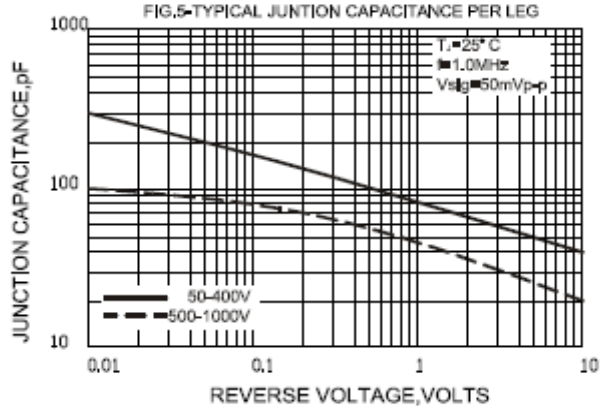
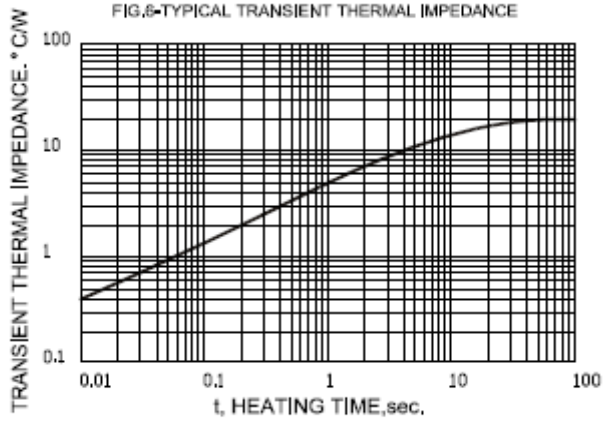
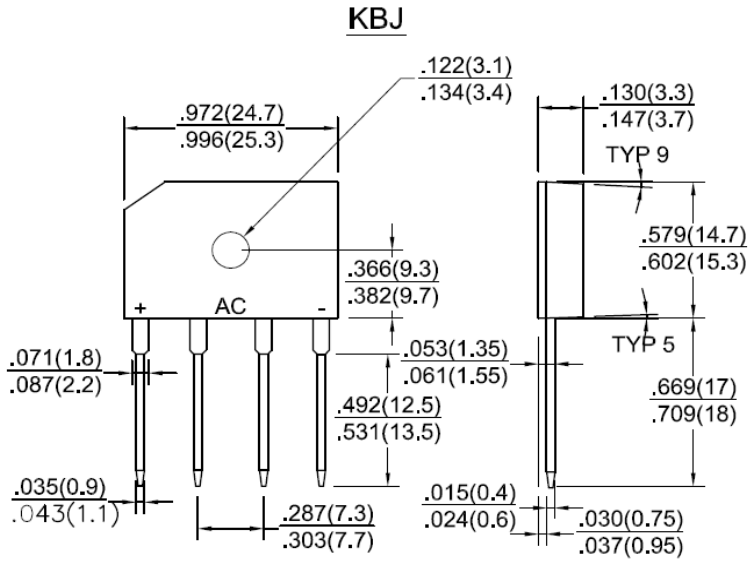


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)