



GAIA TECH KBJ25005 --- KBJ2510

SILICON BRIDGE RECTIFIER

VOLTAGE RANGE: 50 --- 1000 V

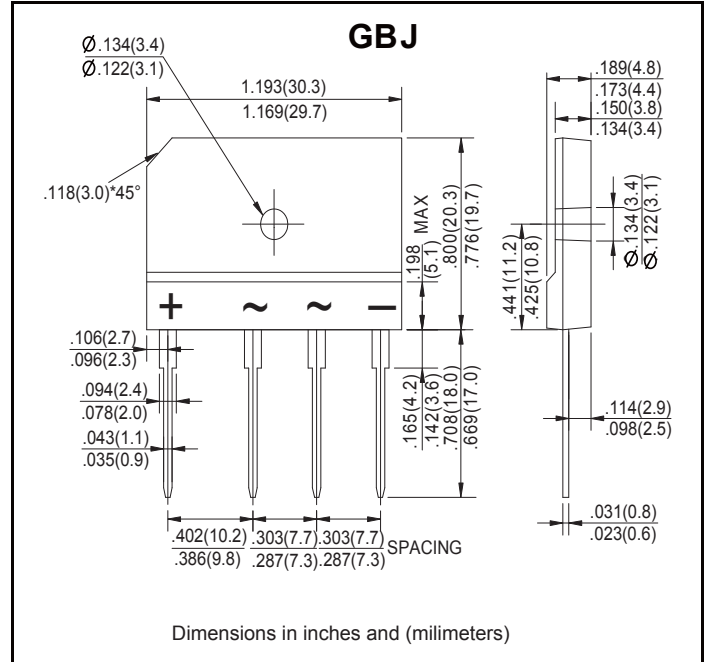
CURRENT: 25.0 A

FEATURES

- 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
- Weight: 0.24 ounces, 6.79grams

MECHANICAL DATA

- Polarity: Symbols molded on body
- Weight: 0.23 ounces, 6.6 grams
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate 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}	35	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}	350							A
Maximum Forward Voltage at 12.5A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	10.0 500							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 +150							°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.



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

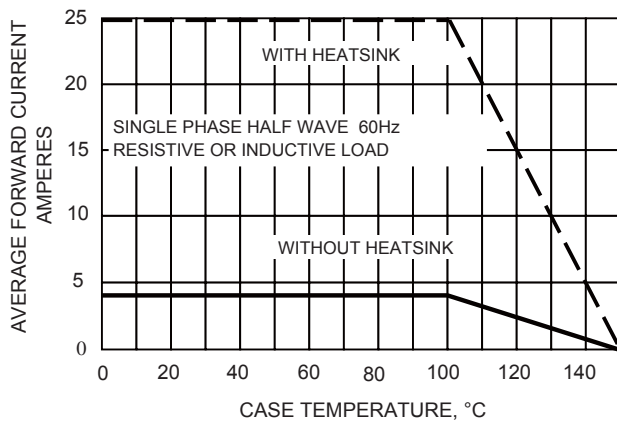


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

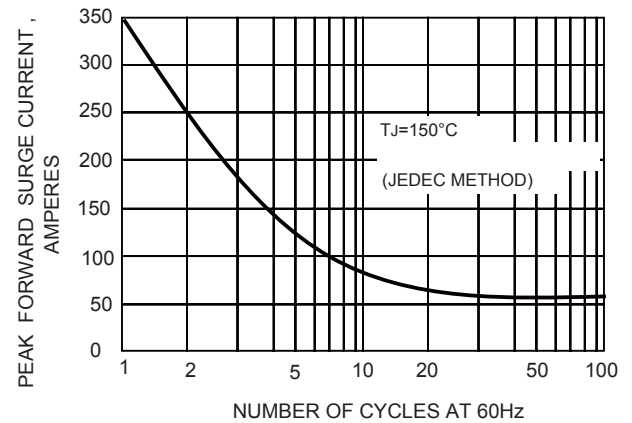


FIG.3-TYPICAL JUNCTION CAPACITANCE

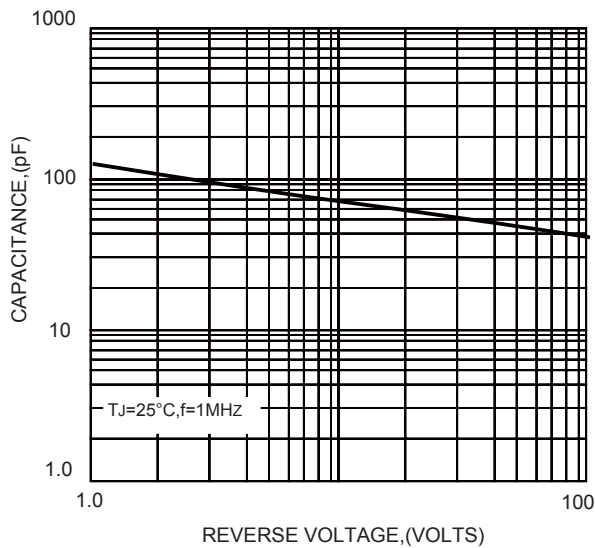


FIG.4-TYPICAL FORWARD CHARACTERISTICS

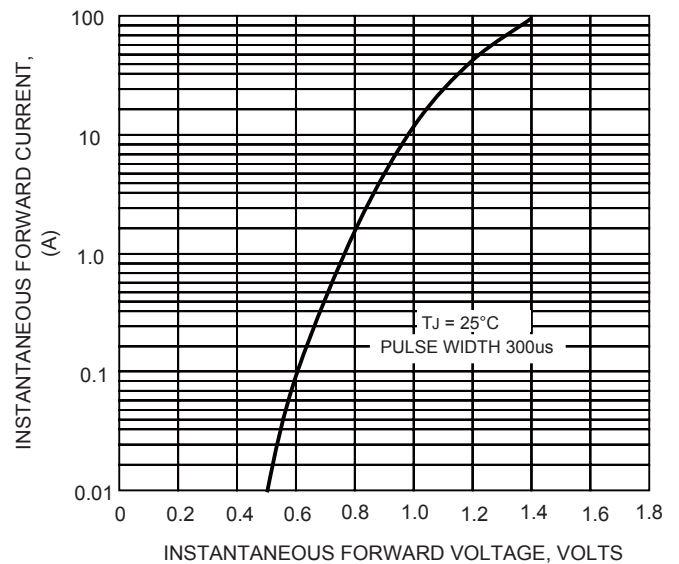


FIG.5-TYPICAL REVERSE CHARACTERISTICS

