

## KBU SILICON BRIDGE RECTIFIER

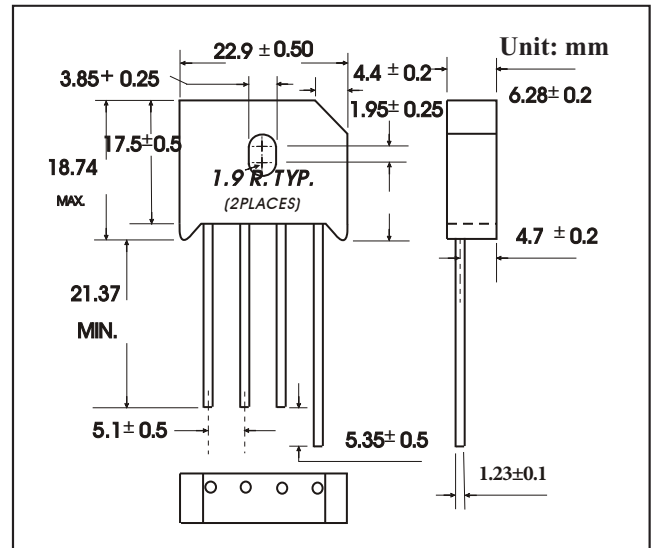
REVERSE VOLTAGE: 50 --- 1000V CURRENT: 6.0A

### FEATURES

- Surge overload rating -175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0

### MECHANICAL DATA

- Case style: GBU plastic molded
- Weight: 0.138 ounces , 3.9grams



### 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%.

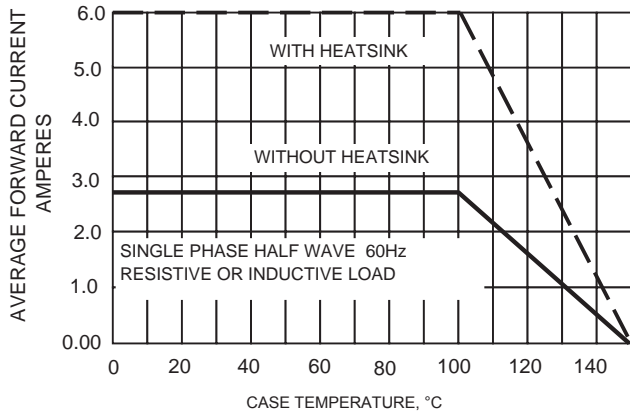
CHARACTERISTICS	SYMBOL	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>C</sub> =100°C (with heatsink Note 2)	I <sub>(AV)</sub>	6.0							A
Rectified Current @ T <sub>C</sub> =100°C (without heatsink)		2.8							
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	175							A
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> =25°C	I <sub>R</sub>	10.0							uA
		500							
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	127							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	50							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	2.2							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

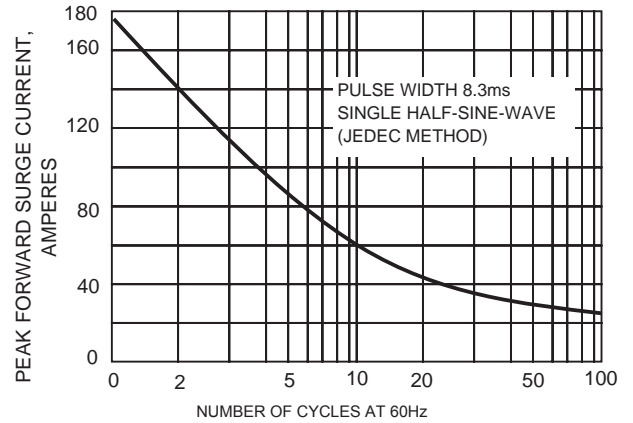
2. Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink.

## RATINGS AND CHARACTERISTIC CURVES

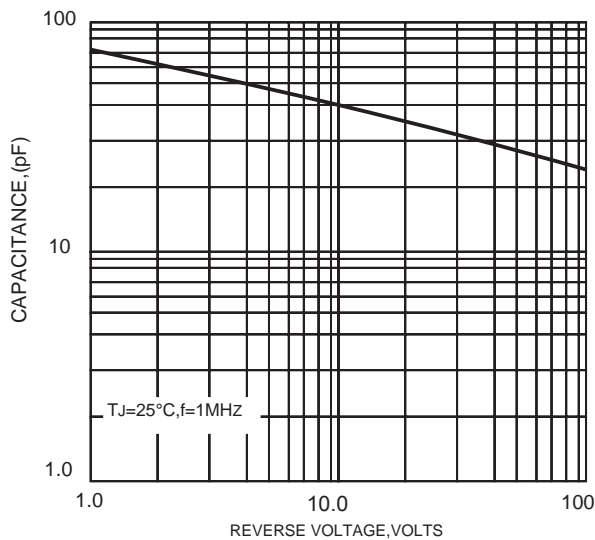
**FIG.1-FORWARD CURRENT DERATING CURVE**



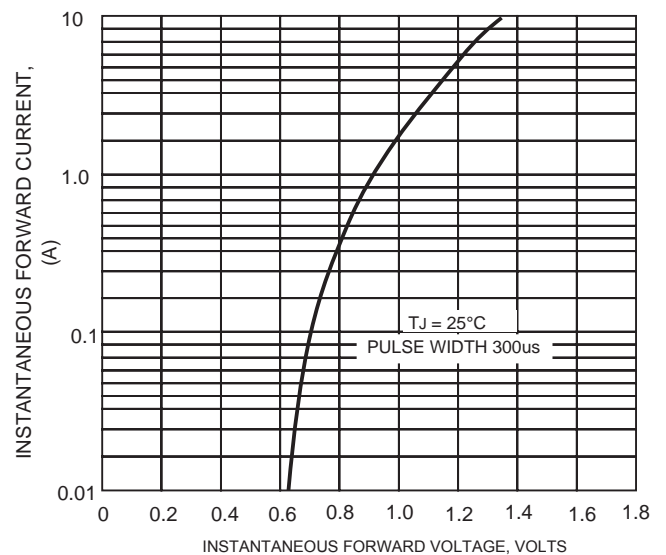
**FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3-TYPICAL JUNCTION CAPACITANCE**



**FIG.4-TYPICAL FORWARD CHARACTERISTICS**



**FIG.5-TYPICAL REVERSE CHARACTERISTICS**

