

SILICON BRIDGE RECTIFIER

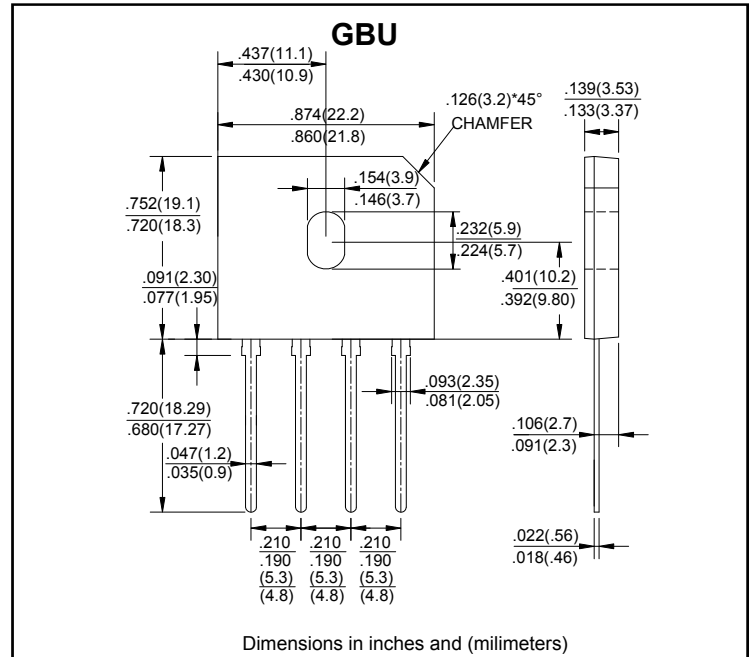
VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 6.0 A

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 _{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 (with heatsink Note 2) @ T _C =100°C (without heatsink)	I _(AV)	6.0 2.8							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	175							A
Maximum Forward Voltage at 3.0A DC	V _F	1.1							V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0 500							uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	127							A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	50							pF
Typical Thermal Resistance (Note2)	R _{θJC}	2.2							°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 75mm*75mm*1.6mm cu plate heatsink.



RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

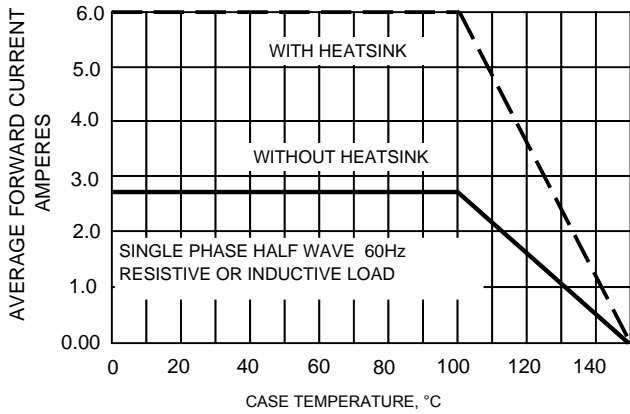


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

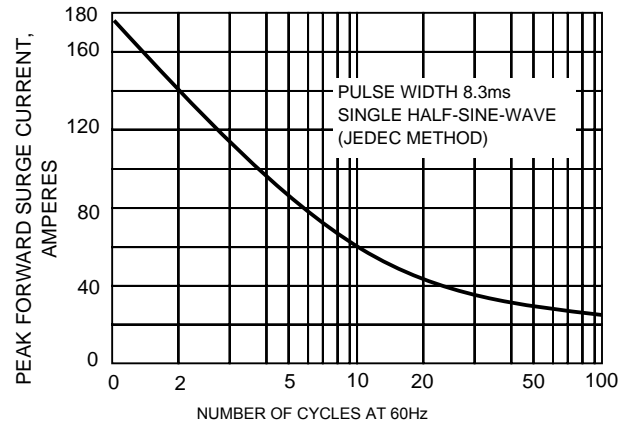


FIG.3-TYPICAL JUNCTION CAPACITANCE

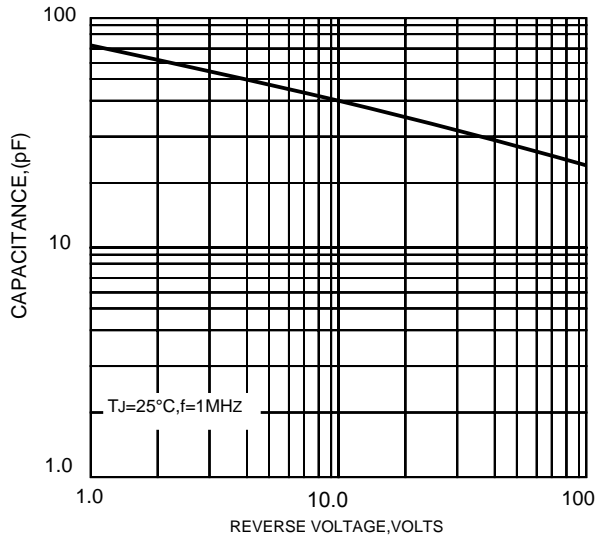


FIG.4-TYPICAL FORWARD CHARACTERISTICS

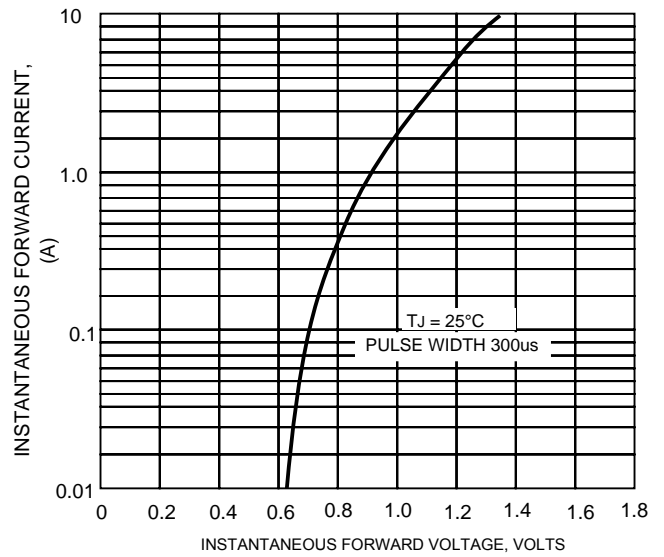


FIG.5-TYPICAL REVERSE CHARACTERISTICS

