

SILICON BRIDGE RECTIFIER

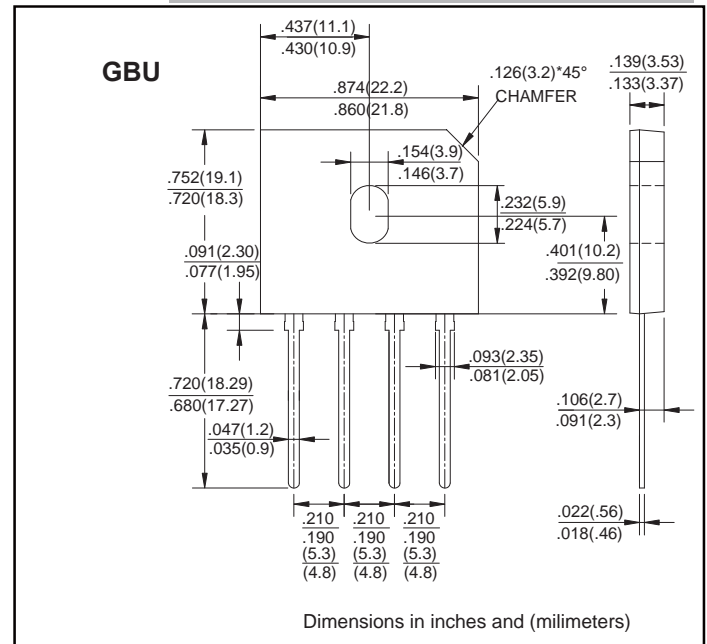
VOLTAGE RANGE: 50 --- 1000 V
FORWARD CURRENT: 10/ 15/25 A

FEATURES

- Surge overload rating -220~350 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any
- Weight: 0.138 ounces , 3.9 grams

MECHANICAL DATA

- Case style: GBU plastic molded
- Weight: 0.05 ounces, 1.52 grams



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	GBU	GBU	GBU	GBU	GBU	GBU	GBU	UNIT
		10005 15005 25005	1001 1501 2501	1002 1502 2502	1004 1504 2504	1006 1506 2506	1008 1508 2508	1010 1510 2510	
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 (with heatsink Note 2) Rectified Current @ T _C =100°C (without heatsink)	I _(AV)	GBU 10	10 3.0	GBU 15	15 3.2	GBU 25	25 4.2		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}		220		240		350	A	
Maximum Forward Voltage at 5.0/7.5/12.5A DC	V _F	1.0							V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0 500							μA
I ² t Rating for Fusing (t<8.3ms)	I ² t	200							A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	70							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 100mm*100mm*1.6mm cu plate heatsink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-MAXMUN NON-REPETITVE SURGE CURRENT

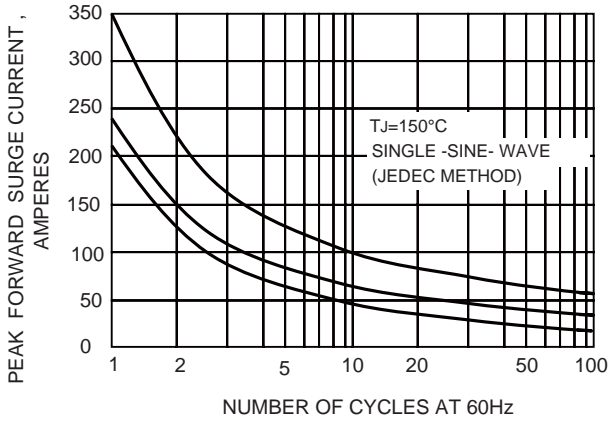


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

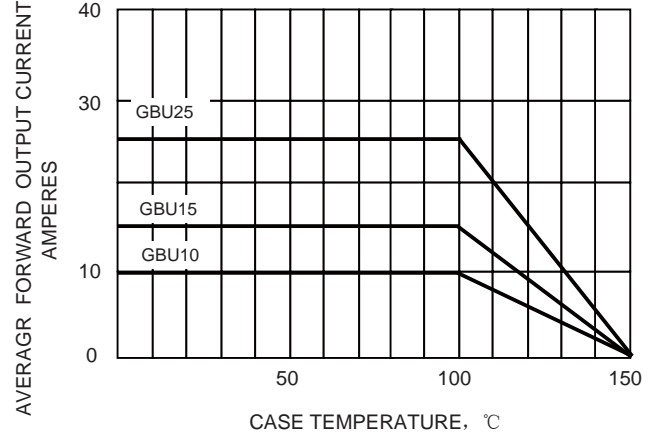


FIG.3-TYPICAL FORWARD CHARACTERISTICS

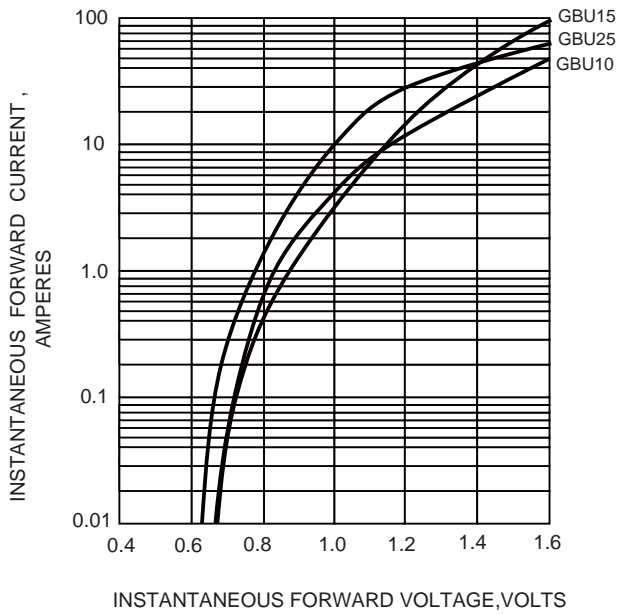


FIG.4-TYPICAL REVERSE CHARACTERISTICS

