

## Silicon Bridge Rectifiers

## GBU8005--GBU810

### FEATURES

- Rating to 1000V PRV
- Surge overload rating to 200 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Glass passivated junctions



Lead-free

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	UNITS
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 Output current @T <sub>C</sub> =100°C	I <sub>F(AV)</sub>	8.0							A
Peak forward surge current 8.3ms single half-sine-wav superimposed on rated load	I <sub>FSM</sub>	200							A

### Thermal Characteristics

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	UNITS
Operating junction temperature range	T <sub>J</sub>	- 55 ---- + 150							°C
Storage temperature range	T <sub>STG</sub>	- 55 ---- + 150							°C

### Electrical Characteristics (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	UNITS
Maximum instantaneous forward voltage @4.0A	V <sub>F</sub>	1.0							V
Maximum reverse current @T <sub>A</sub> =25 °C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	10.0							μ A
		1.0							mA



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**PACKAGE OUTLINE DIMENSIONS**

GBU		
Dim	Min	Max
A	22.00	22.40
B	18.40	18.80
C	3.40	3.95
C1	2.50	3.00
E	0.40	0.60
F	17.00min	
F1	1.70	2.30
I1	2.30	2.60
I2	0.95	1.25
K	4.70	5.30
P	R1.9typical	
All Dimensions in mm		

**PACKAGE INFORMATION**

Device	Package	Shipping
GBU8005--GBU810	GBU	500 Units/Box



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FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

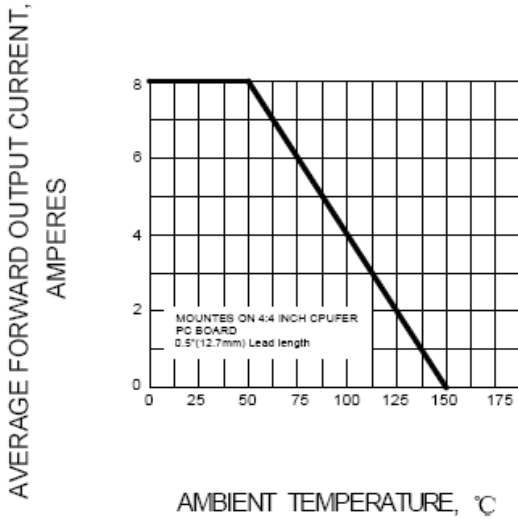


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

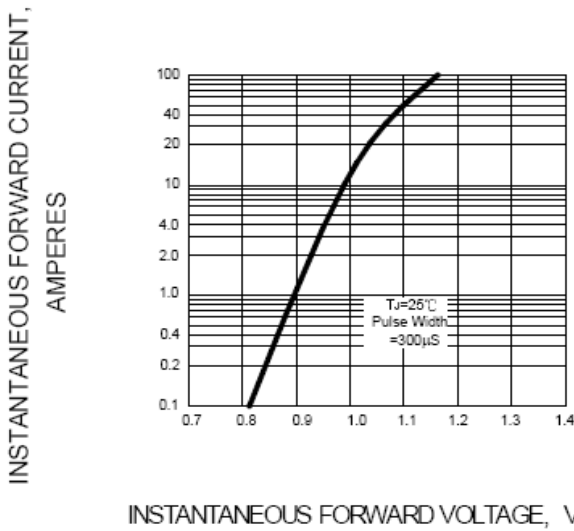


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER ELEMENT

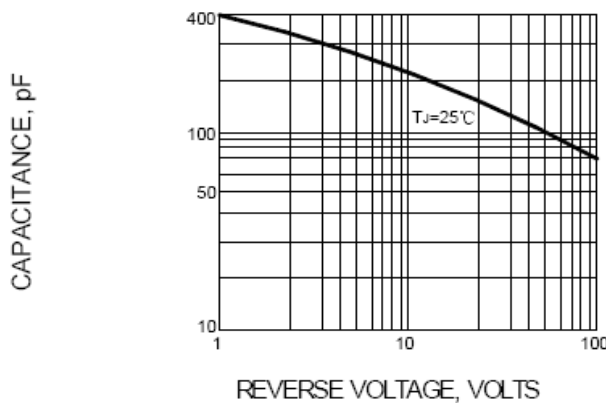


FIG.2 – MAXIMUM FORWARD SURGE CURRENT

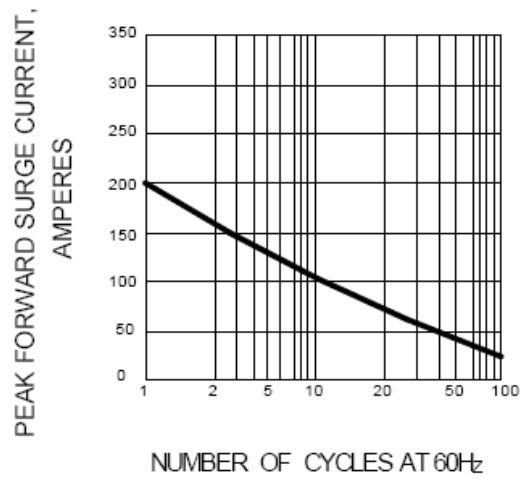


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

