

# GBU8M-T25

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 1000V

Current: 8.0A



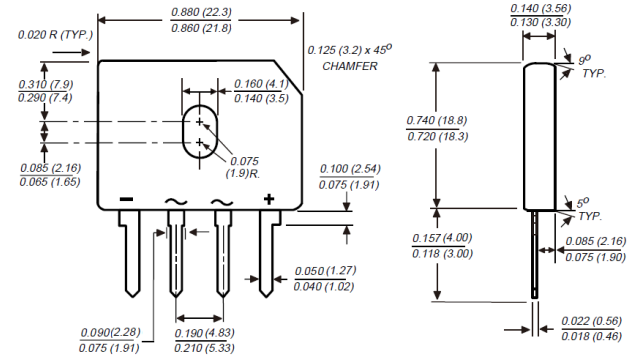
### Features

Ideal for printed circuit board  
Glass passivated chip junction  
High case dielectric strength  
High surge overload rating  
This series is UL listed under Recognized Component Index, file number E330278

### Mechanical Data

Terminal: Plated leads solderable per J-STD-002  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: Thru hole for #6 screw

### GBU-T25



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

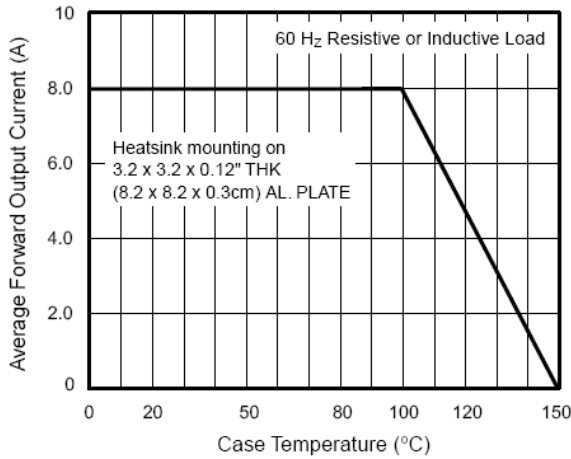
	Symbol	GBU8M-T25	units
Maximum repetitive peak reverse voltage	V <sub>rrm</sub>	1000	V
Maximum RMS voltage	V <sub>rms</sub>	700	V
Maximum DC blocking voltage	V <sub>dc</sub>	1000	V
Maximum average forward rectified output current at T <sub>c</sub> = 100°C (Note 1)	I <sub>f(av)</sub>	8.0	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I <sub>fsm</sub>	200	A
Maximum instantaneous forward voltage drop per leg at 8.0A	V <sub>f</sub>	1.0	V
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	166	A <sup>2</sup> Sec
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>r</sub>	5.0 500	μA
Typical junction capacitance per leg at 4V,1MHz	C <sub>j</sub>	94	pF
Maximum thermal resistance per leg (Note3)	R <sub>th(ja)</sub> R <sub>th(jc)</sub>	21 2.2	°C/W
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

Note:

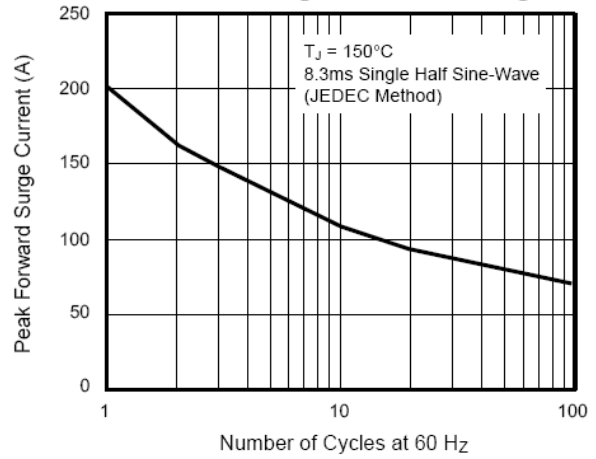
- Unit case mounted on 3.2 x 3.2 x 0.12" thick (8.2 x 8.2 x 0.3cm) Al. Plate heatsink
- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- Units mounted in free air, no heatsink on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length

## RATINGS AND CHARACTERISTIC CURVES GBU8M-T25

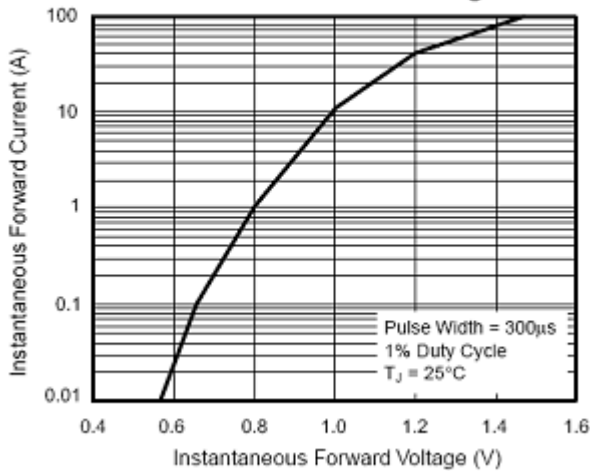
**Fig. 1 – Derating Curve Output Rectified Current**



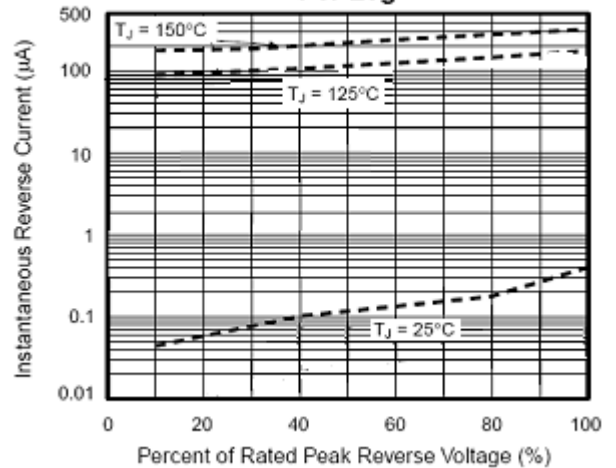
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



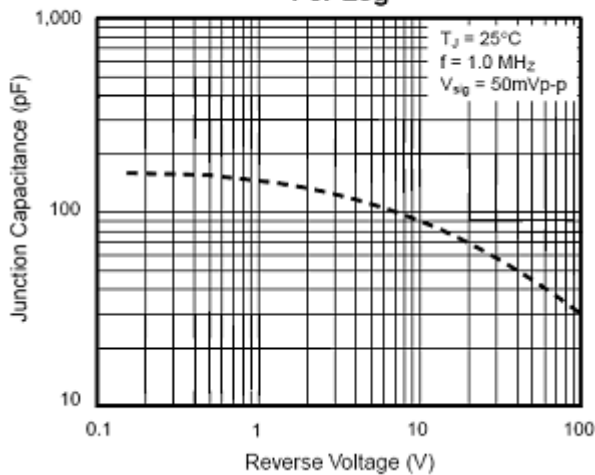
**Fig. 3 – Typical Forward Characteristics Per Leg**



**Fig. 4 – Typical Reverse Characteristics Per Leg**



**Fig. 5 – Typical Junction Capacitance Per Leg**



**Fig. 6 – Typical Transient Thermal Impedance Per Leg**

