

# **GBU8A THRU GBU8M**

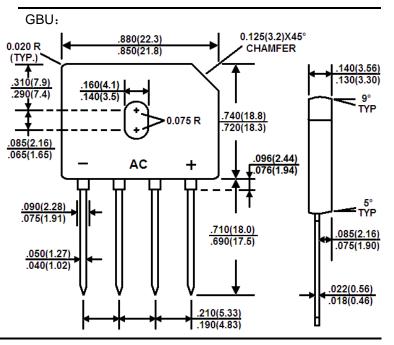
## **Glass Passivated Single Phase Bridge Rectifiers**

#### Features

- \* Plastic package has underwriters laboratory flammability classification 94V-0
- \* Ideal for printed circuit boards
- \* Glass passivated chip junction
- \* High Surge Current Capability
- \* High temperature soldering guaranteed 270°C/10 seconds, 0.375(9.5mm) lead length



### Package Outline Dimensions in inches (millimeters)



#### **Mechanical Data**

\* Case: Molded plastic body over passivated junctions

### **Maximum Ratings and Electrical Characteristics**

Rating at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

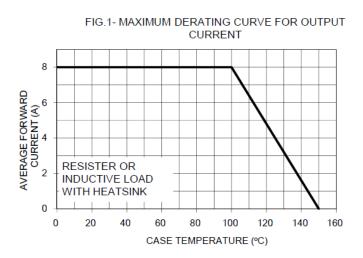
Type Number	Symbols	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>				8.0				А
Peak Forward Surge Current single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200				А			
Maximum instantaneous forward voltage(Note1) I <sub>F</sub> =4.0A I <sub>F</sub> =8.0A	V <sub>F</sub>	1.0 1.1				V			
Maximum Reverse Current @ $T_J=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_J=125^{\circ}C$	I <sub>R</sub>	5.0 500				μA			
Typical junction capacitance per leg (Note2)	CJ	211 94			рF				
Rating for fusing (t<8.3ms)	l <sup>2</sup> t	166				A <sup>2</sup> sec			
Typical thermal resistance	Rejc Reja	2.0 21			°C/W				
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +150			°C				

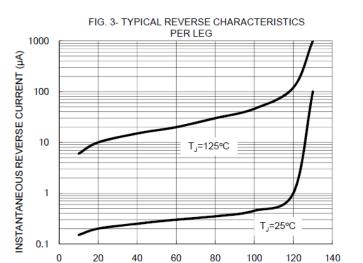
Note: 1、Pulse test with PW=300µs, 1% duty cycle 2、Measured at 1MHz and applied Reverse bias of 4.0V DC



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#### **Ratings and Characteristic Curves**





PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

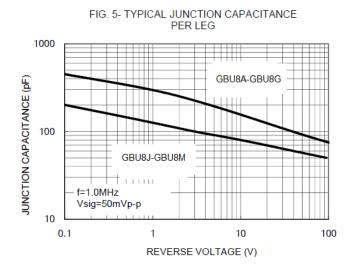
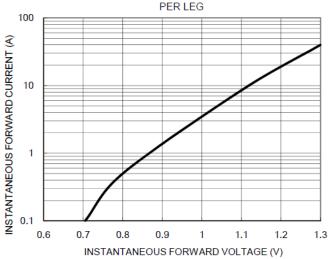


FIG. 2- MAXIMUM FORWARD SURGE CURRENT PER LEG PEAK FORWARD SURGE CURRENT (A) 200 180 160 8.3ms Single Half Sine Wave 140 120 100 80 60 40 20 0 1 10 100 NUMBER OF CYCLES AT 60 Hz

FIG. 4- TYPICAL FORWARD CHARACTERISTICS





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## **Ordering Information**

Part No.	Package	Packing				
GBU8A~ GBU8M	GBU	20pcs/Tube				