

GBU8A ~ GBU8M

PRV : 50 - 1000 Volts

Io : 8.0 Amperes

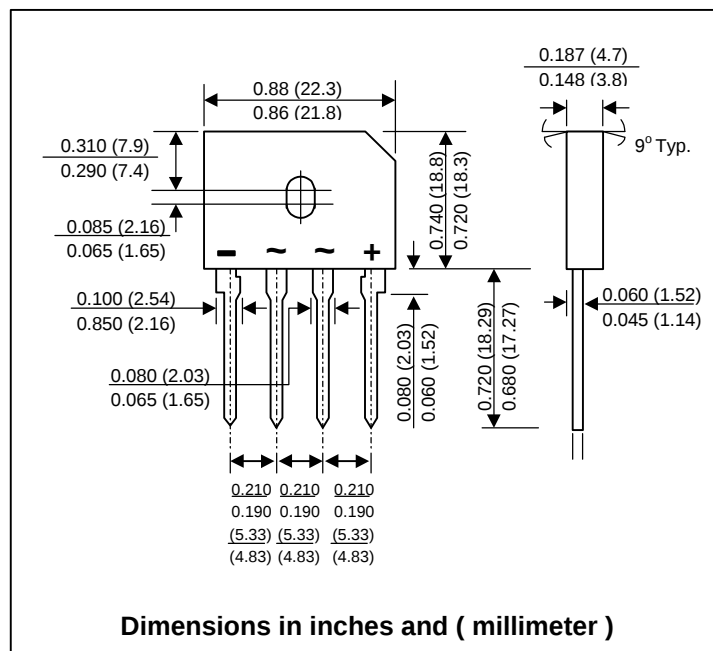
FEATURES :

- * Ideal for printed circuit boards
- * Reliable low cost construction utilizing molded plastic technique
- * Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Molded plastic
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 4 grams

Glass Passivated Single-Phase Bridge Rectifiers



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	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 Output Current Tc=100°C (Note2)	I _{F(AV)}	8.0							A
Peak Forward Surge Current, 8.3ms Single half sine-wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200							A
Rating for fusing (t < 8.3 ms.)	I ² t	166							A ² S
Maximum Instantaneous Forward Voltage per leg at I _F = 8 A	V _F	1.0							V
Maximum DC Reverse Current T _J = 25 °C at Rated DC Blocking Voltage per leg T _J = 100 °C	I _R	5.0							μA
	I _{R(H)}	500							
Typical Junction capacitance per element (Note1)	C _J	211				94			pF
Typical Thermal Resistance (Note 2)	R _{θJC}	2.2							°C/W
Operating Junction Temperature Range	T _J	- 50 to + 150							°C
Storage Temperature Range	T _{STG}	- 50 to + 150							°C

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC

(2) Units case mounted on 3.2" x 3.2" x 0.12" THK (8.2 x 8.2 x 0.3cm Al. Plate heatsink.

RATING AND CHARACTERISTIC CURVES (GBU8A - GBU8M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

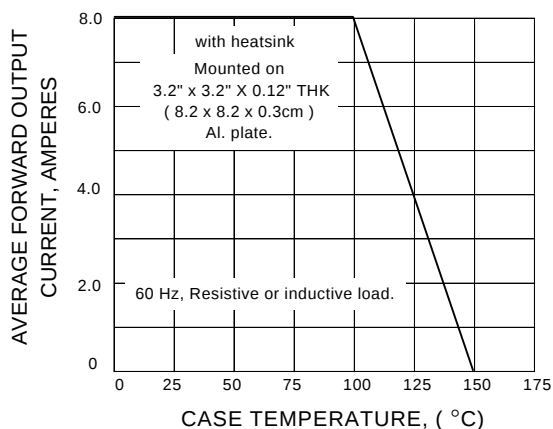


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

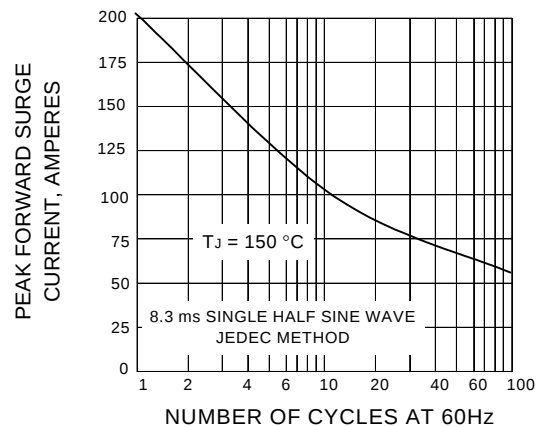


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

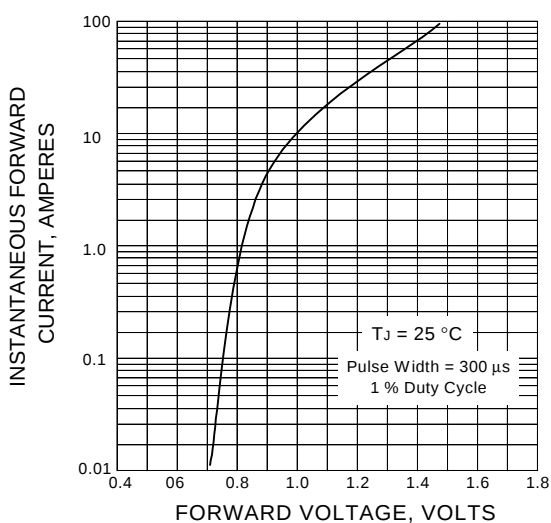


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

