

GBU8A ~ GBU8M

PRV : 50 - 1000 Volts
Io : 8.0 Amperes

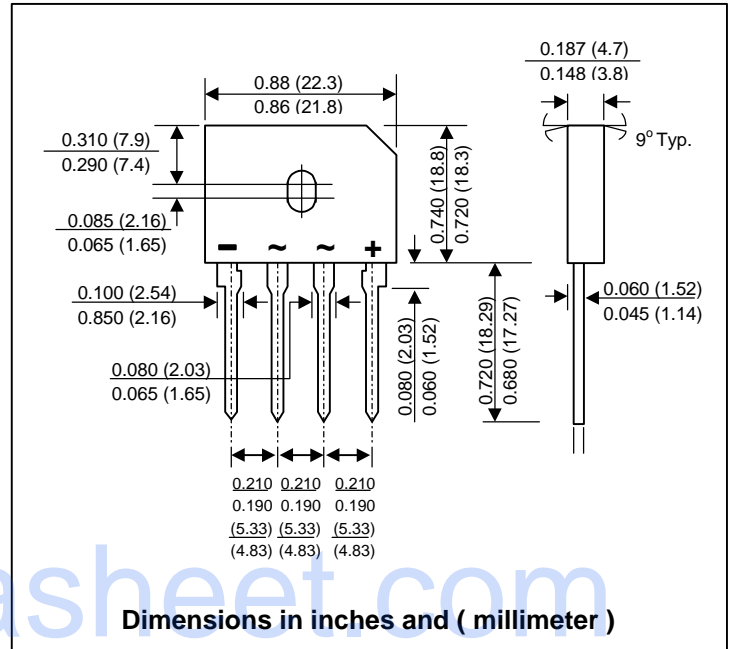
FEATURES :

- * 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 $T_c=100^\circ\text{C}$ (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^2t	166							A^2S	
Maximum Instantaneous Forward Voltage per leg at $I_F = 8$ A	V_F	1.0							V	
Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage per leg $T_J = 100^\circ\text{C}$	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)	$R_{\theta JC}$	2.2							$^\circ\text{C/W}$	
Operating Junction Temperature Range	T_J	- 50 to + 150							$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	- 50 to + 150							$^\circ\text{C}$	

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

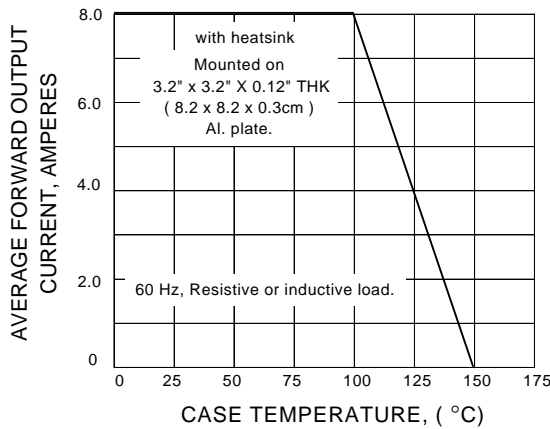


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

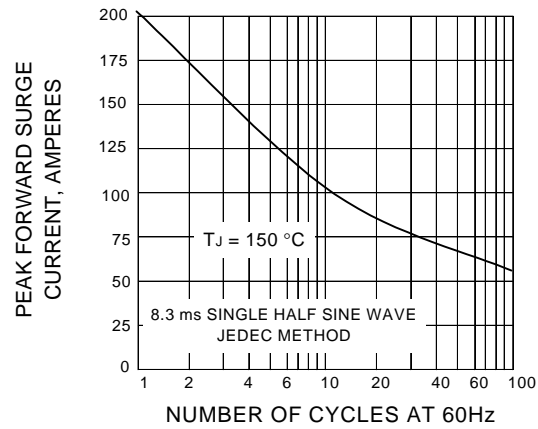


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

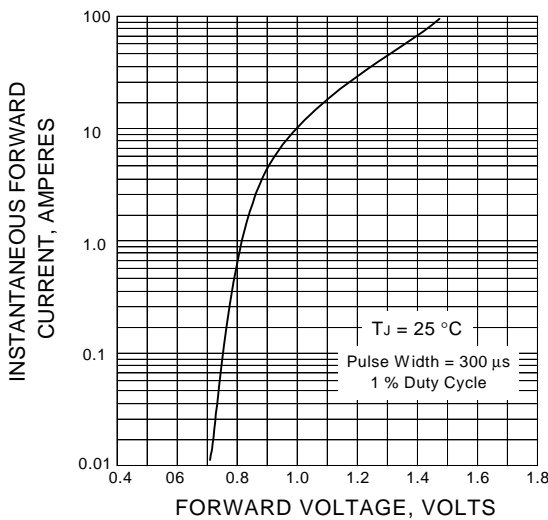


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

