

GBU10A ~ GBU10M

Glass Passivated Single-Phase Bridge Rectifiers

PRV : 50 - 1000 Volts

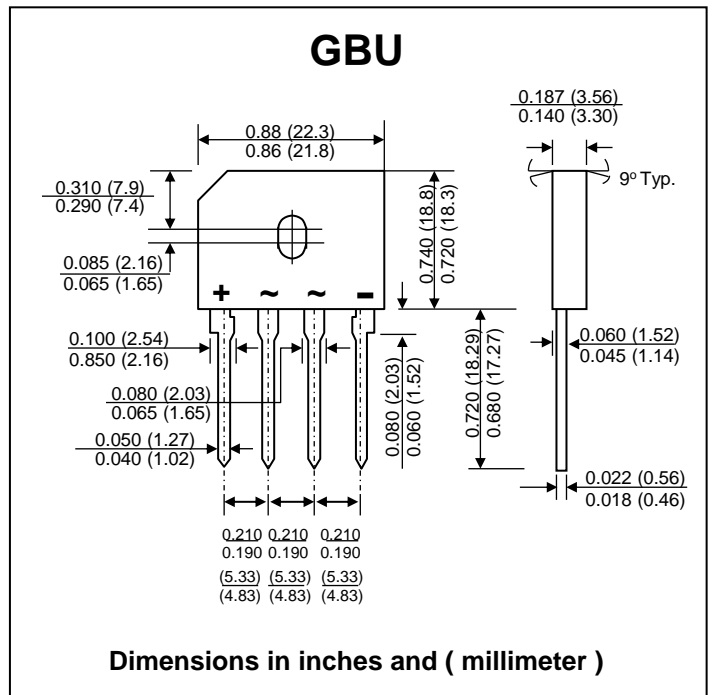
Io : 10 Amperes

FEATURES :

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

MECHANICAL DATA :

- * Case: Molded plastic, GBU
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.15ounce, 4.0gram



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	GBU	GBU	GBU	GBU	GBU	GBU	UNIT
		10A	10B	10D	10G	10J	10K	10M	
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
Average Rectifier Output Current 60 Hz sine wave	$I_{F(AV)}$	10							A
$T_C=80\text{ }^\circ\text{C}$ (1)	$T_C=25\text{ }^\circ\text{C}$ (1)	3.6							
Peak Forward Surge Current, 8.3ms Single half sine-wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Maximum Forward Voltage at $I_F = 5\text{ A}$	V_F	1.0							V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$	I_R	5							μA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	25							$^\circ\text{C/W}$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.3							$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							$^\circ\text{C}$

Notes :

(1) Units mounted in free air, no heatsink on P.C.B., 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" lead length

RATING AND CHARACTERISTIC CURVES (GBU10A ~ GBU10M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

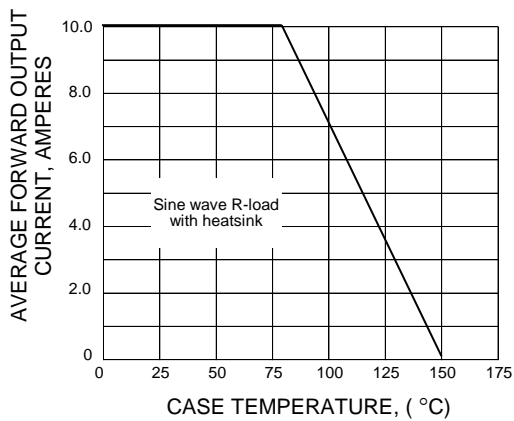


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

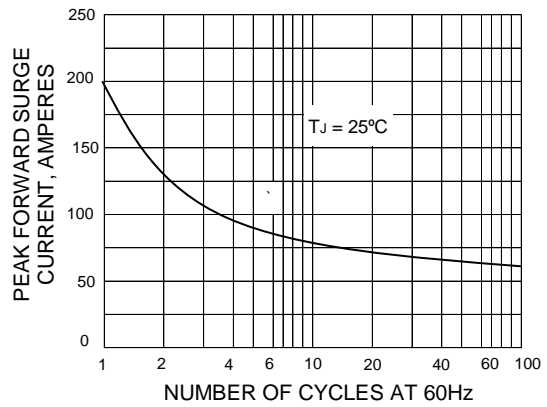


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

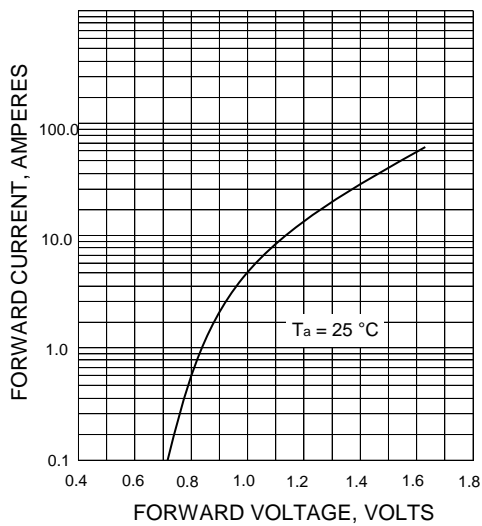


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

