

GBU8005 ~ GBU810

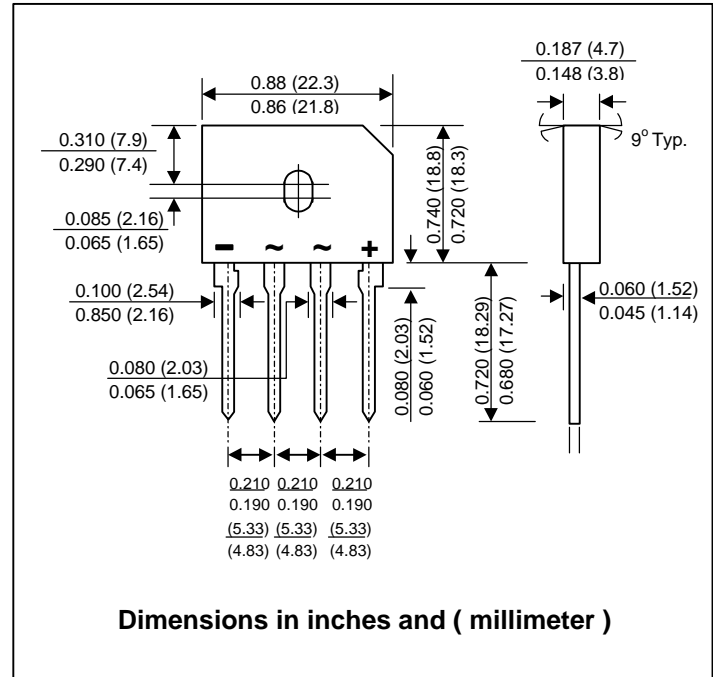
Glass Passivated Single-Phase Bridge Rectifiers

PRV : 50 - 1000 Volts

I_o : 8.0 Amperes

FEATURES :

- * Surge overload rating - 200 Amperes peak
- * Ideal for printed circuit boards
- * Reliable low cost construction utilizing molded plastic technique
- * Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- * Mounting Position : Any
- * **Pb / RoHS Free**



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 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	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 Output Current T _c =100°C	(with heatsink note2) (without heatsink)	I _{F(AV)}	8.0							A
			3.2							
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 at I _F = 4 A		V _F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J = 25 °C	I _R	5.0							μA
	T _J = 100 °C	I _{R(H)}	500							
Typical Junction capacitance per element (Note1)		C _J	60							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) Device mounted on 100mm x 100mm x 1.6mm Cu. Plate heatsink.

RATING AND CHARACTERISTIC CURVES (GBU8005 - GBU810)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

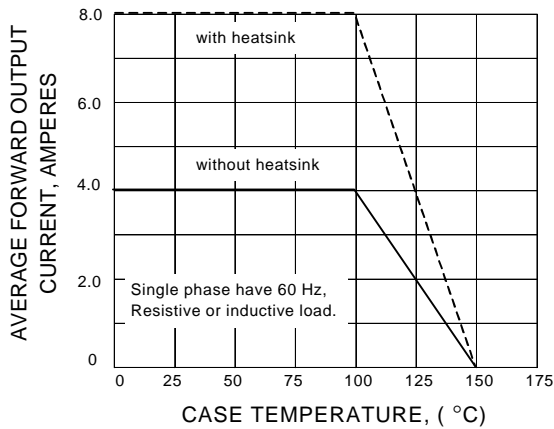


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

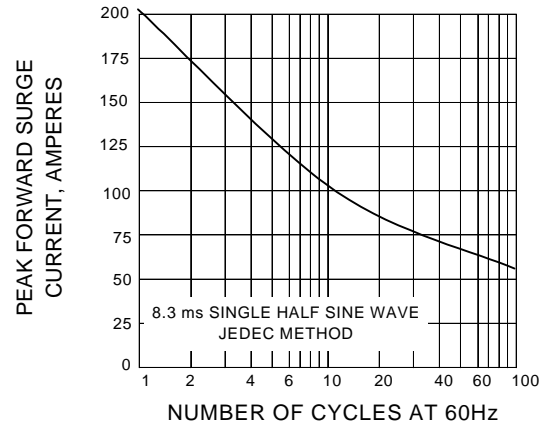


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

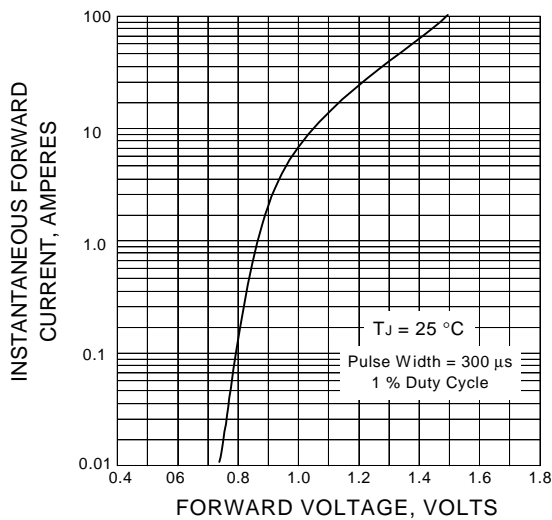


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

