Pb Free Plating Product

GBU10005 thru GBU1010

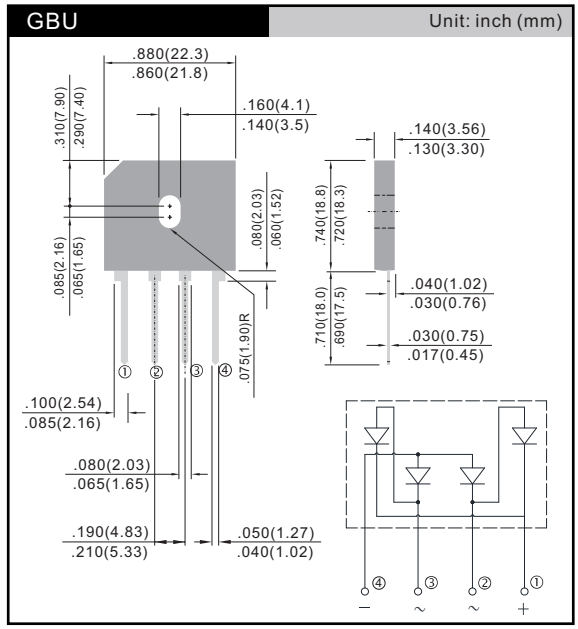
6.0 AMPERE GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIERS

Features

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique

Mechanical Data

- **Case:** Molded plastic GBU
- **Terminals:** leads solderable per MIL-STD-202 Method 208 guaranteed
- **Mounting Position:** Any



Maximum Ratings and Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic		Symbol	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Forward Rectified Current (Note 4) @ T_C = +100°C		$I_{(AV)}$	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	220							A
Forward Voltage (per element)	@ I_F = 5.0A	V_{FM}	1.0							V
Peak Reverse Current at Rated DC Blocking Voltage	@ T_C = +25°C @ T_C = +125°C	I_R	5.0 500							μA
I^2t Rating for Fusing (Note 5)		I^2t	200							A^2s
Typical Total Capacitance per Element (Note 6)		C_T	60							pF
Typical Thermal Resistance Junction to Case (Note 4)		$R_{\theta JC}$	2.2							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 to +150							°C

Notes: 4. Unit mounted on 100mm x 100mm x 1.6mm copper plate heatsink.
5. Non-repetitive, for t > 1.0ms and < 8.3ms.
6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

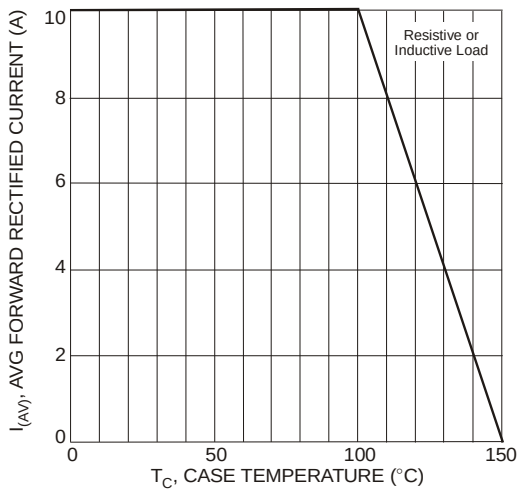


Figure 1 Forward Current Derating Curve

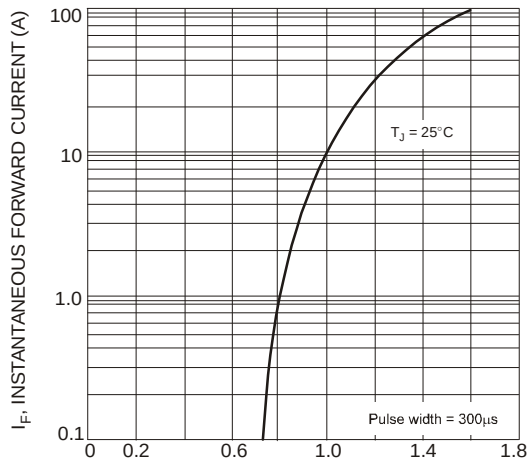


Figure 2 Typical Forward Characteristics, per element

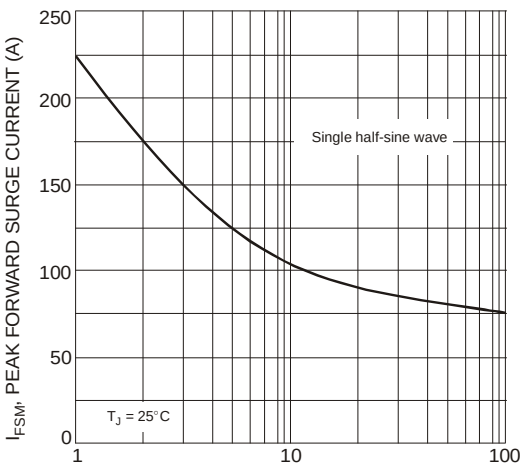


Figure 3 Maximum Non-Repetitive Surge Current

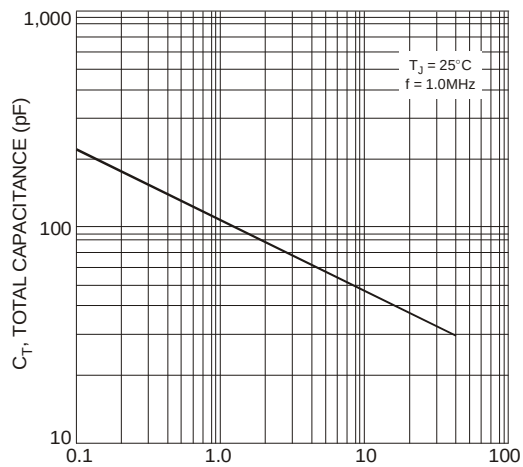


Figure 4 Typical Total Capacitance, per element