



GBU10005 THRU GBU1010

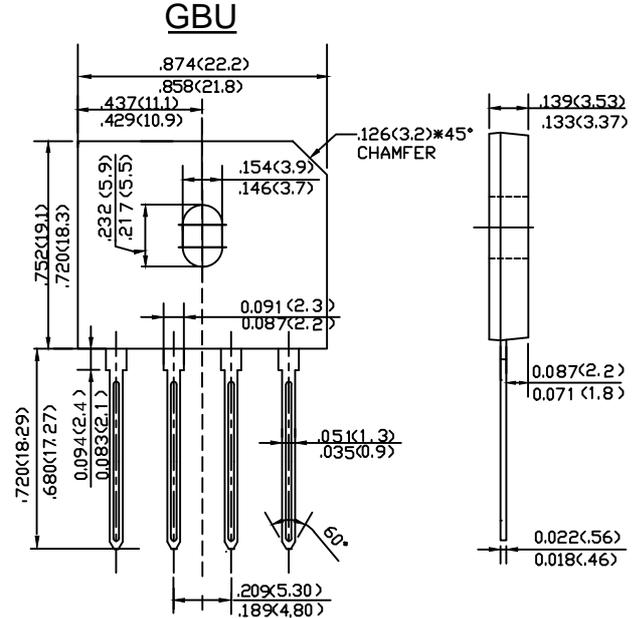
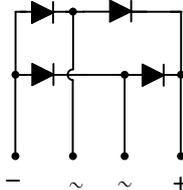
SINGLE PHASE 10.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: G B U , molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version



dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single Phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (with heatsink) @T _c =90°C (without heatsink)	$I_{F(AV)}$				10.0 3.0				A
Non-Repetitive Peak Forward Surge Current @T _J =25°C 8.3ms Single half sine-wave superimposed @T _J =125°C on rated load (JEDEC Method)	I_{FSM}				240 192				A
Non-Repetitive Peak Forward Surge Current 1 ms Single half sine-wave @T _J =25°C @T _J =125°C superimpose on rated load (JEDEC Method)	I_{FSM}				480 384				A
Forward Voltage per element @I _F =5.0A	V_{FM}				1.0				V
Peak Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I_R				5.0 200				uA
I ² t Rating for fusing (t <8.3ms)	I^2t				239.04				A ² s
Dielectric Strength	V_{ids}				2500				V
The proposed installation torque Max torque	Tor				5.0 8.0				Kgf.cm
Typical Junction Capacitance (Note 1)	C_J				75				pF
Typical Thermal Resistance	$R_{\theta JA}$				28				°C/W
	$R_{\theta JC}$				8.7				
	$R_{\theta JL}$				5.3				
Operating and Storage Temperature Range	T _J , T _{STG}				-55to+150				°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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Fig. 1 Output Current Derating Curve

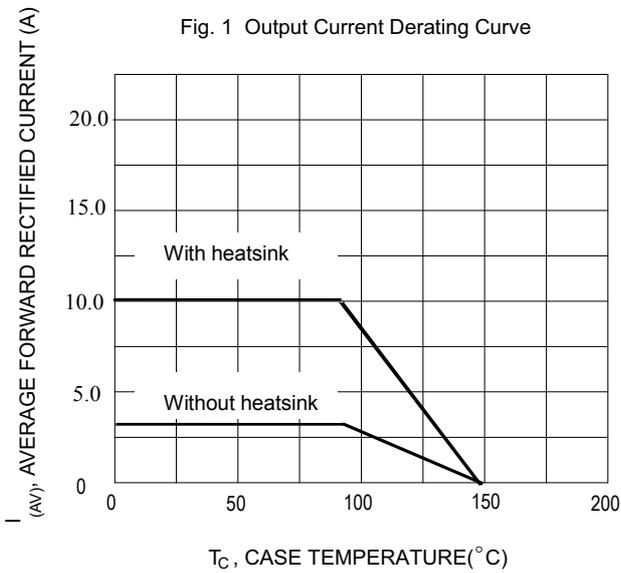


Fig. 2 Typical Forward Characteristics

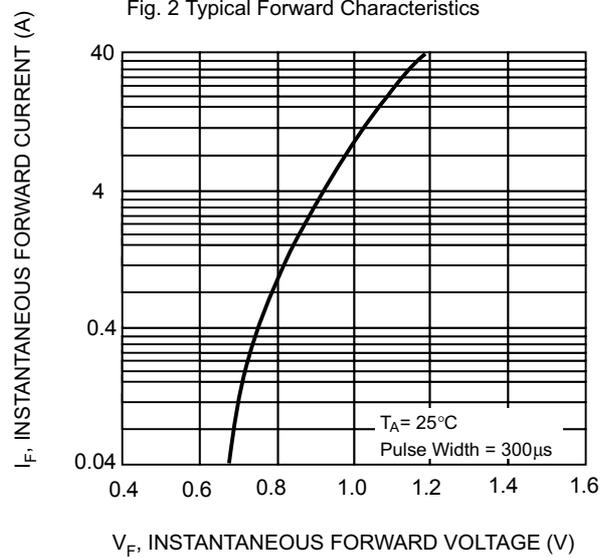


Fig. 3 Maximum Peak Forward Surge Current

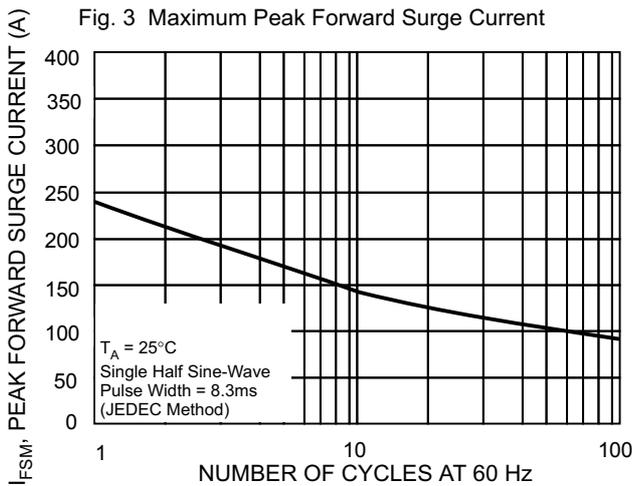


Fig. 4 Typical Junction Capacitance

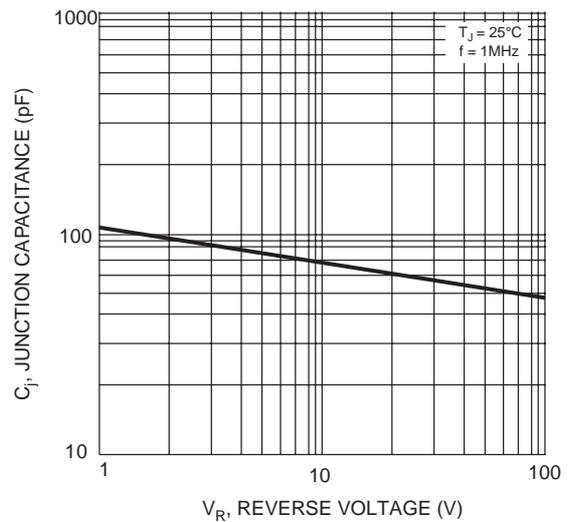
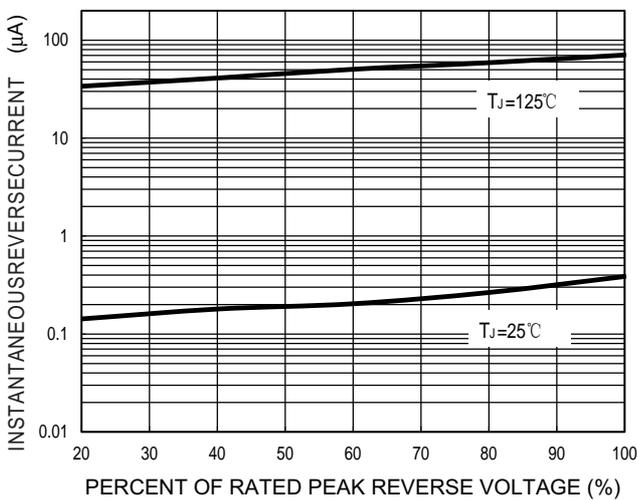


Fig. 5 Typical Reverse Characteristics





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