GBU15005 THRU GBU1510

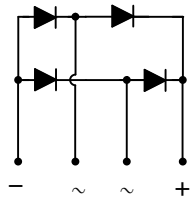
SINGLE PHASE 15.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

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



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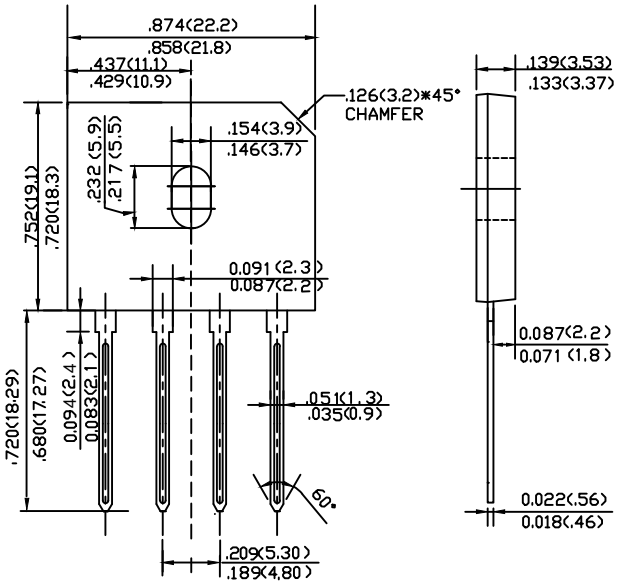


dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (with heatsink) @T_C =90℃ (without heatsink)	$I_{F(AV)}$	15.0 3.3							A
Non-Repetitive Peak Forward Surge Current @T_J=25℃ 8.3ms Single half sine-wave superimposed @T_J=125℃ on rated load (JEDEC Method)	I_{FSM}	300 240							A
Non-Repetitive Peak Forward Surge @T_J=25℃ Current 1 ms Single half sine-wave @T_J=125℃ superimpose on rated load (JEDEC Method)	I_{FSM}	600 480							A
Forward Voltage per element @IF=7.5A	V_{FM}	1.0							V
Peak Reverse Current @T_J=25℃ At Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 200							uA
I^2t Rating for fusing (t <8.3ms)	I^2t	373.5							A^2s
Dielectric Strength	Vids	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							℃/W
	$R_{\theta JC}$	8.7							
	$R_{\theta JL}$	5.3							
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

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

Fig. 1 Output Current Derating Curve

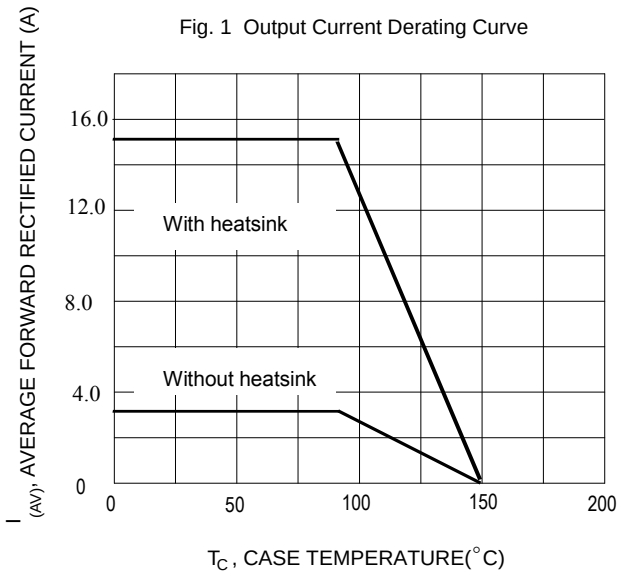


Fig. 2 Typical Forward Characteristics (per leg)

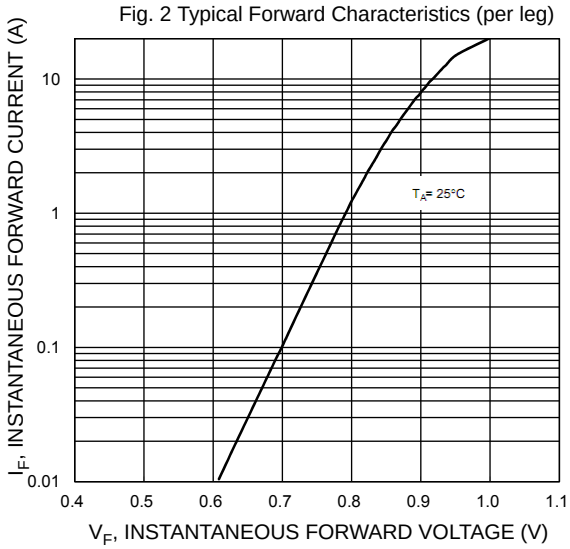


Fig. 3 Maximum Peak Forward Surge Current (per leg)

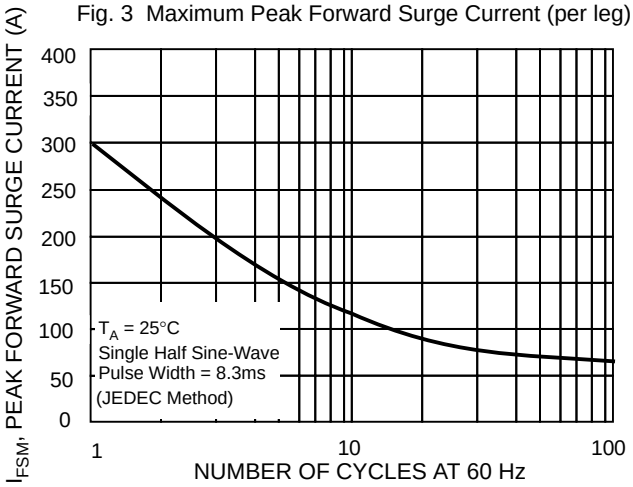


Fig. 4 Typical Junction Capacitance

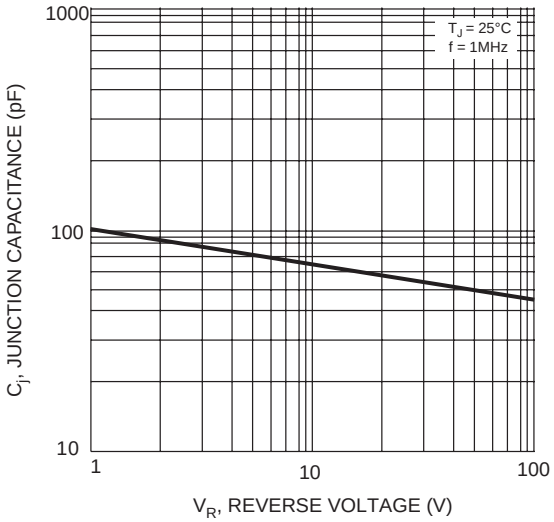
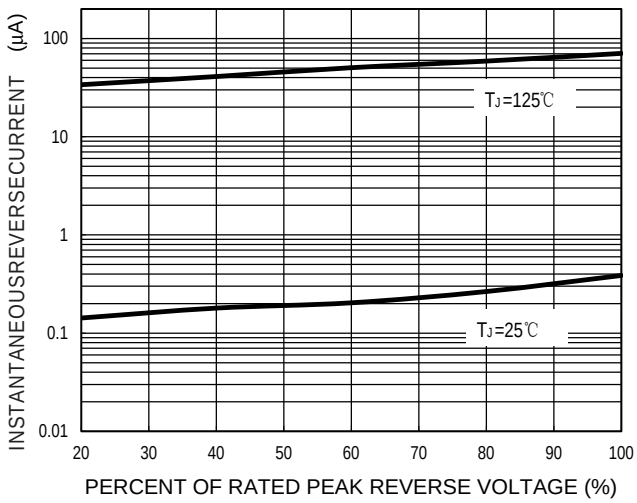


Fig. 5 Typical Reverse Characteristics



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