



GBU6005 THRU GBU610

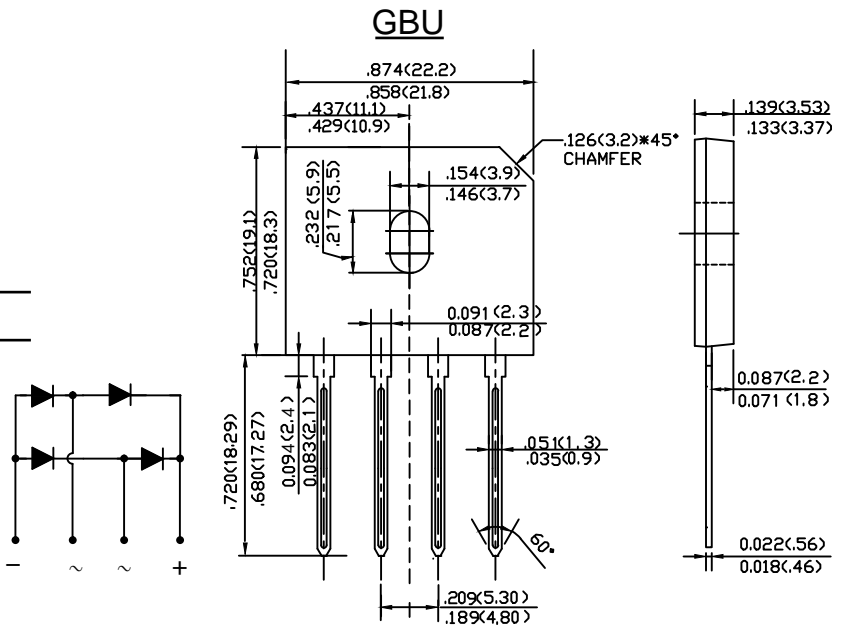
SINGLE PHASE 6.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

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: GBU, 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

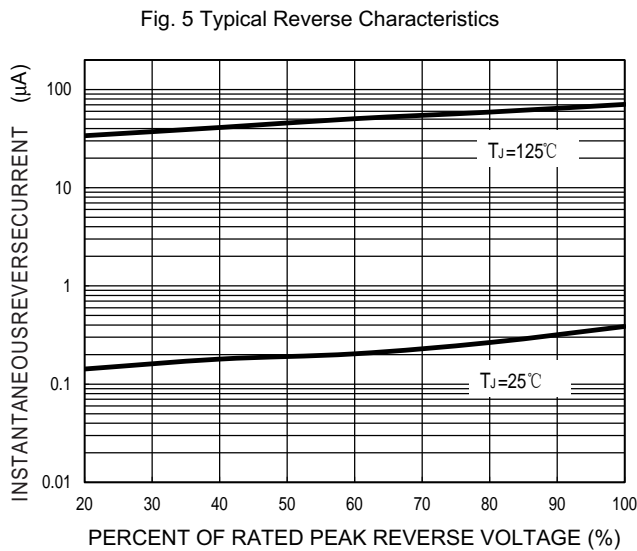
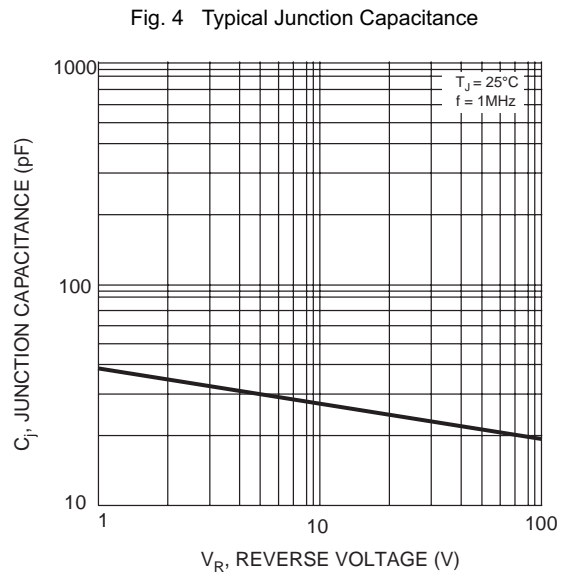
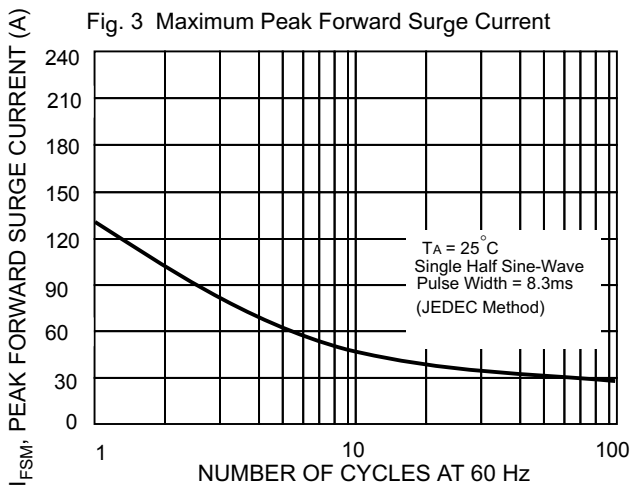
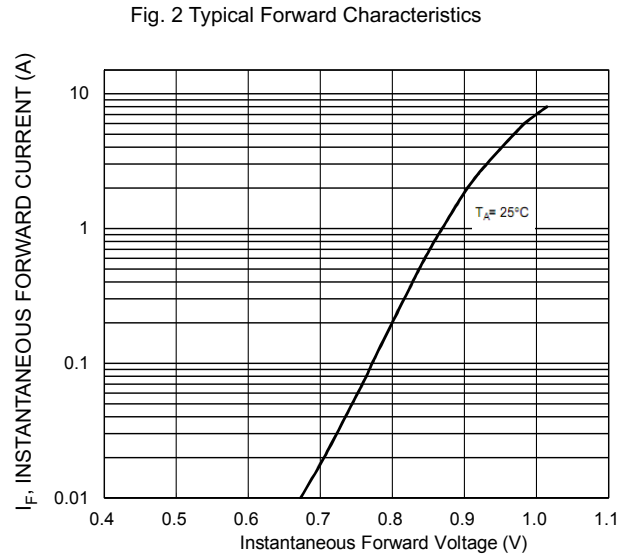
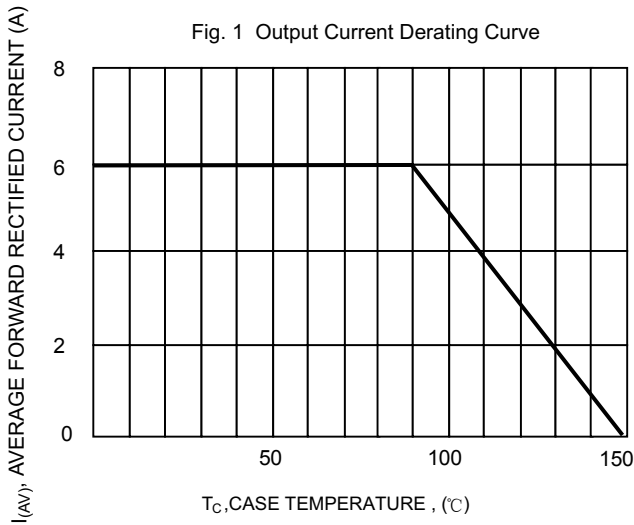
Rating at 25°C ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNITS	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_{DC}									
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1)@ $T_c=90^\circ C$	$I_{F(AV)}$	6.0							A	
Non-Repetitive Peak Forward Surge Current @ $T_J=25^\circ C$ 8.3ms Single half sine-wave superimposed @ $T_J=125^\circ C$ on rated load (JEDEC Method)	I_{FSM}				130	104				A
Non-Repetitive Peak Forward Surge Current 1 ms Single half sine-wave @ $T_J=25^\circ C$ superimpose on rated load (JEDEC Method)	I_{FSM}				260	208				A
Forward Voltage per element @ $I_F=3.0A$ @ $I_F=6.0A$	V_{FM}				1.0	1.1				V
Peak Reverse Current @ $T_J=25^\circ C$ At Rated DC Blocking Voltage $T_J=125^\circ C$	I_R				5.0	200				μA
I^2t Rating for fusing (t < 8.3ms)	I^2t				70.135					A^2s
Dielectric Strength	V_{ids}				2500					V
The proposed installation torque Max torque	T_{or}				5.0	8.0				Kgf.cm
Typical Junction Capacitance (Note 2)	C_J				30					pF
Typical Thermal Resistance	$R_{\theta JA}$				22					$^\circ C/W$
	$R_{\theta JC}$				3.4					
	$R_{\theta JL}$				2.1					
Operating and Storage Temperature Range	T_J, T_{STG}				-55to+150					$^\circ C$

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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