

GBU10005 THRU GBU1010

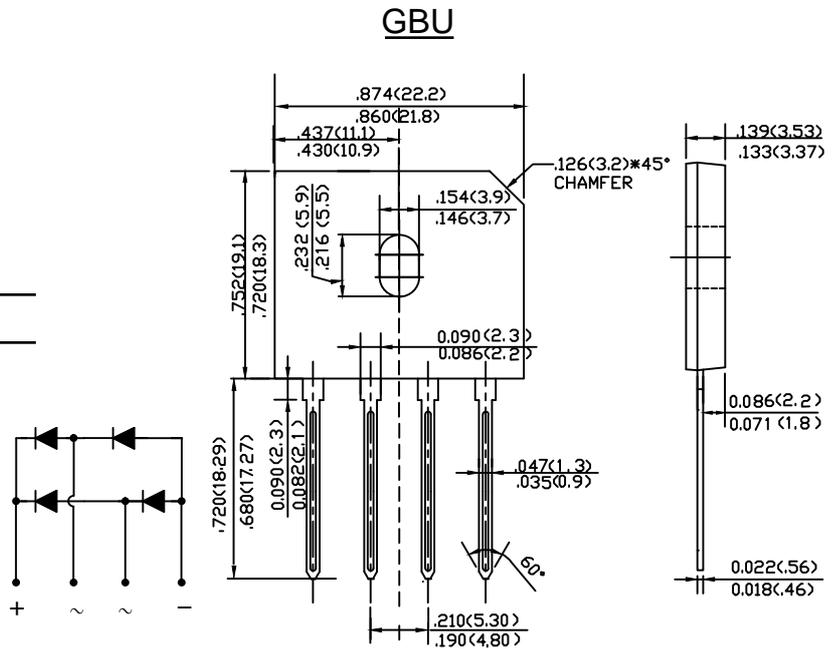
SINGLE PHASE 10.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

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: 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



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

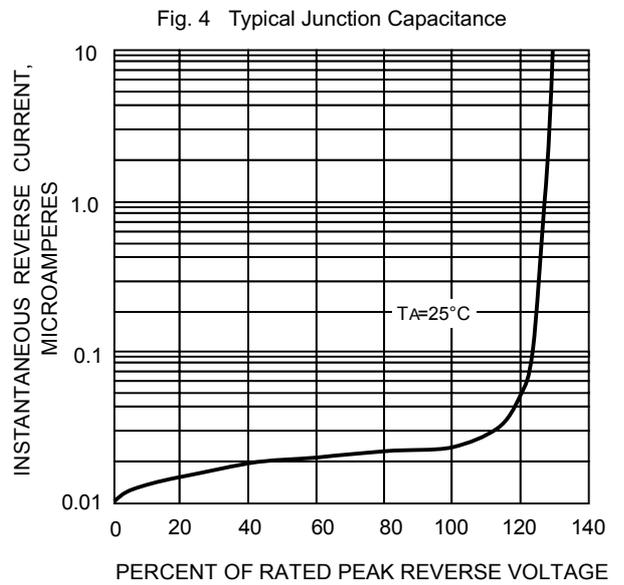
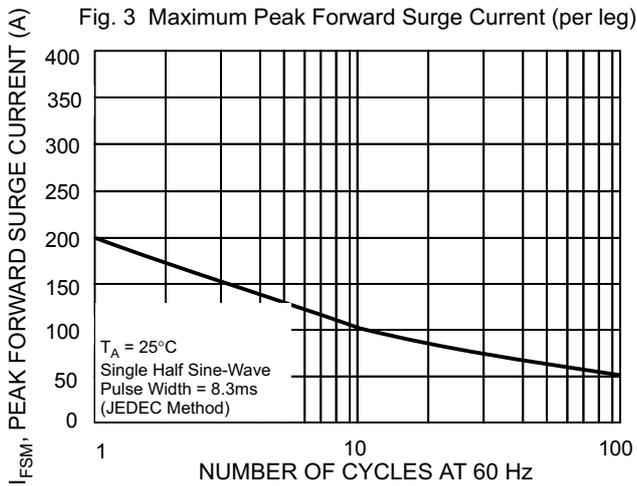
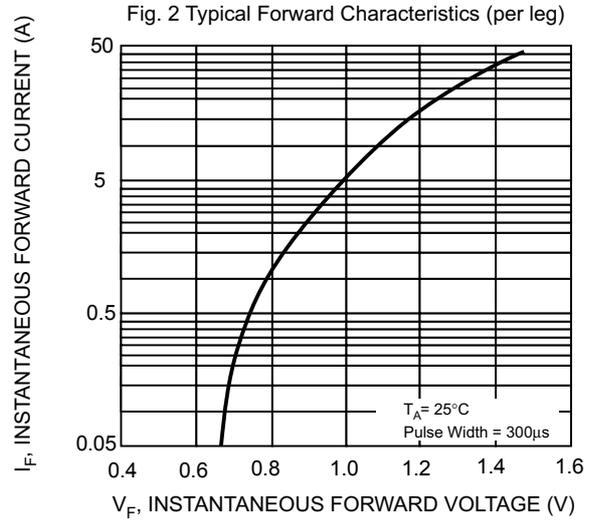
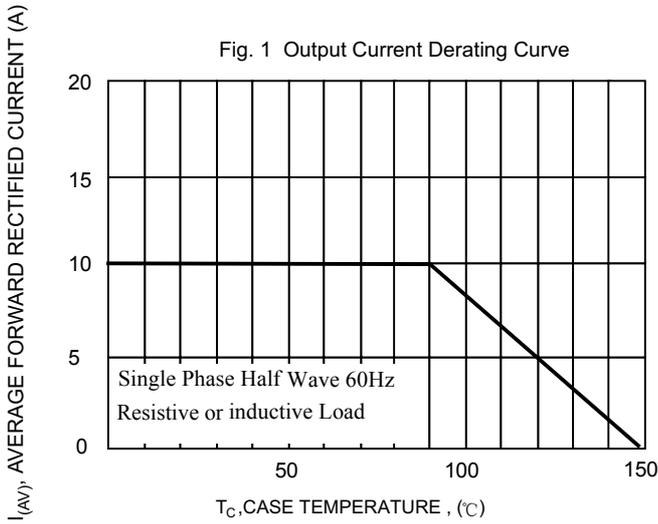
For capacitive load, derate current by 20%.

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 (Note 1)@ $T_c=90^\circ C$	$I_{F(AV)}$	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Forward Voltage per element @ $I_F=5A$ @ $I_F=10A$	V_{FM}	1.0 1.1							V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	5.0 500							μA
I^2t Rating for fusing ($t < 8.3ms$)	I^2t	166							A^2s
Typical Junction Capacitance per leg (Note 2)	C_J	70							pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	30.9							$^\circ C/W$
	$R_{\theta JL}$	7.3							
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.

3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.



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