



GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER



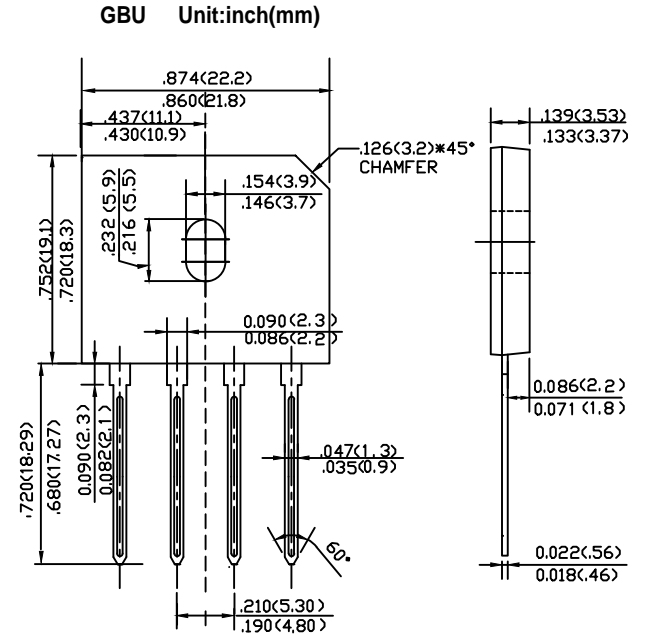
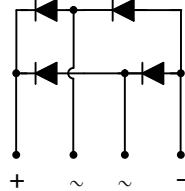
Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

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 Rating 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 10A	GBU 10B	GBU 10D	GBU 10G	GBU 10J	GBU 10K	GBU 10M	UNIT
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) @ $T_C=90^\circ C$	$I_{F(AV)}$	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 @ $I_F=5A$ @ $I_F=10A$	$V_F$	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							$\mu A$
$I^2t$ Raging 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)	$R_{\theta JA}$	31							$^\circ C/W$
	$R_{\theta JL}$	7.3							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ C$

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> 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.

# DEVICE CHARACTERISTICS

## GBU10A THRU GBU10M

