



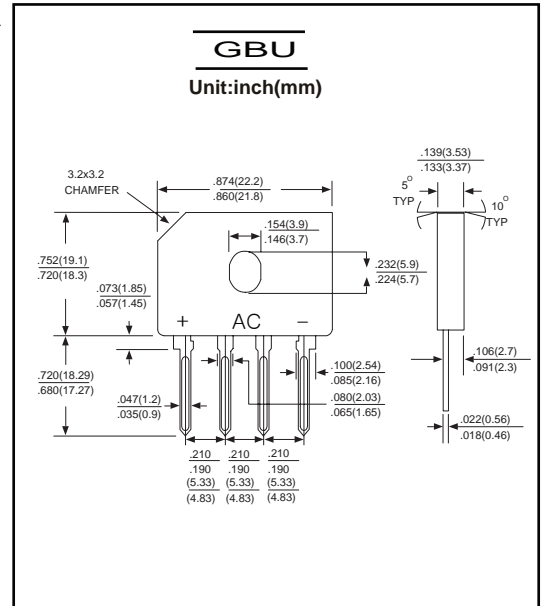
**GLASS PASSIVATED CHIP SINGLE-PHASE BRIDGE RECTIFIER**  
**Reverse Voltage - 50 to 1000 Volts Forward Current 4.0 Amperes**

**Features**

- ✦ UL Recognized File # E-96005
- ✦ Ideal for printed circuit board
- ✦ Reliable low cost construction
- ✦ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✦ Surge overload rating to 150 amperes peak
- ✦ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

**Mechanical Data**

- ✦ Case: Molded plastic body
- ✦ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ✦ Weight: 0.3 ounce, 8.0 grams
- ✦ Mounting torque: 5 in. lbs. Max.



**Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	Units	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified output current (See Fig.2)	$I_{F(AV)}$	4.0								Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150								Amps
Maximum instantaneous forward voltage drop per leg at 4.0A	$V_F$					1.1				Volt
Maximum DC reverse current at rated DC blocking voltage per leg $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$					5.0				$\mu\text{A}$
Typical thermal resistance per leg (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$					20.0				$^\circ\text{C/W}$
Typical Junction Capacitance (Note 3)	$C_j$	100				45				pF
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150								$^\circ\text{C}$

- Notes: 1. Mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) Copper Pads and 0.375" 9.5mm) Lead Length.  
 2. Mounted on Al. Plate of 2" x 3" x 0.25"  
 3. Measured at 1.0MHZ and Applied Reverse Voltage of 4.0 Volts.



## RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

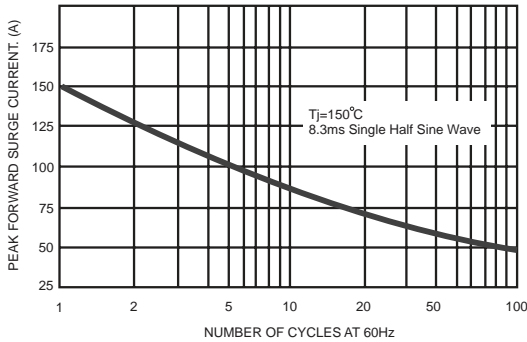


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

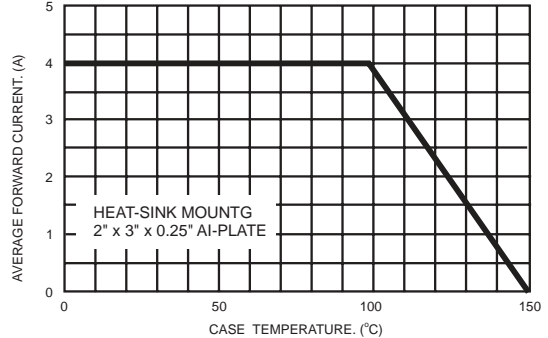


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

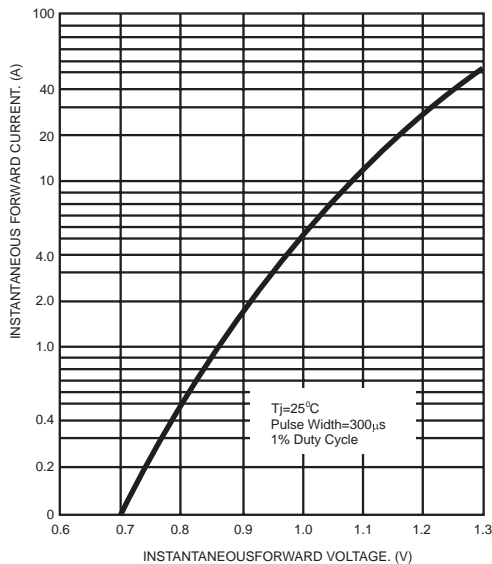


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

