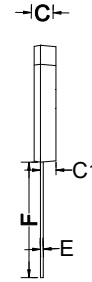
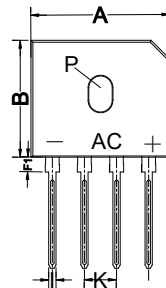


## FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-O
- Mounting position: Any
- Glass passivated chip junctions



GBU		
Dim	Min	Max
A	21.60	22.40
B	18.20	18.80
C	3.20	3.80
C1	1.80	2.80
E	0.40	0.60
F	17.00min	
F1	1.70	2.40
I	0.95	1.25
K	4.70	5.30
P	R1.9typical	
All Dimensions in mm		

## Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T <sub>C</sub> =100°C (note1)	$I_{F(AV)}$	4.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	150.0							A
I <sup>2</sup> t Rating for fusing @T <sub>j</sub> =25°C	I <sup>2</sup> t	93							A <sup>2</sup> S

## Thermal Characteristics

Characteristic	Symbol	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	UNITS	
Typical junction capacitance per element (note 3)	$C_J$	100				45				p F
Typical thermal resistance (note2) (note1)	$R_{\theta JA}$ $R_{\theta JC}$	22.0				4.0				°C/W
Operating junction temperature range	$T_J$	- 55 ---- + 150							°C	
Storage temperature range	$T_{STG}$	- 55 ---- + 150							°C	

## Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	UNITS	
Maximum instantaneous forward voltage @2.0A @4.0A	$V_F$					1.0 1.1				V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	$I_R$					5.0 50				μ A

NOTE: 1. Unit case mounted on 1.6x1.6x0.06" thick (4.0x4.0x0.15cm) Al. Plate.

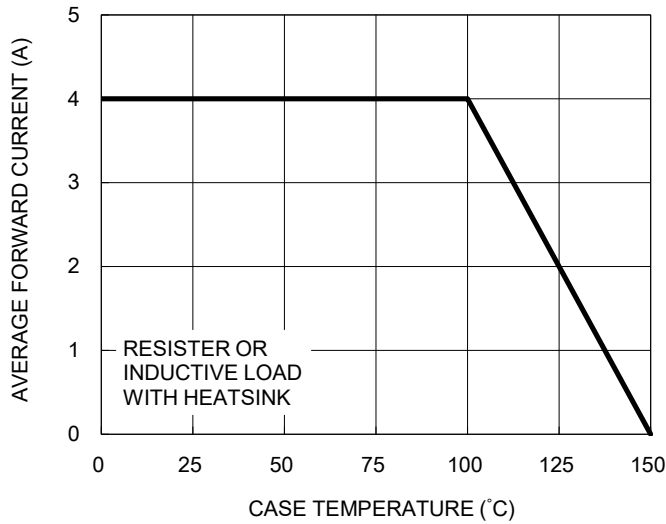
2. Units mounted on P.C.B. with 0.5x0.5" (12x12mm) copper pads and 0.375" (9.5mm) lead length.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

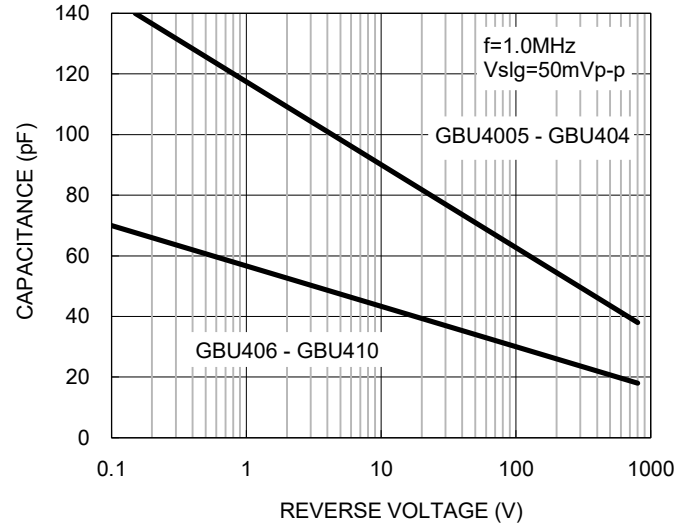
### CHARACTERISTICS CURVES

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

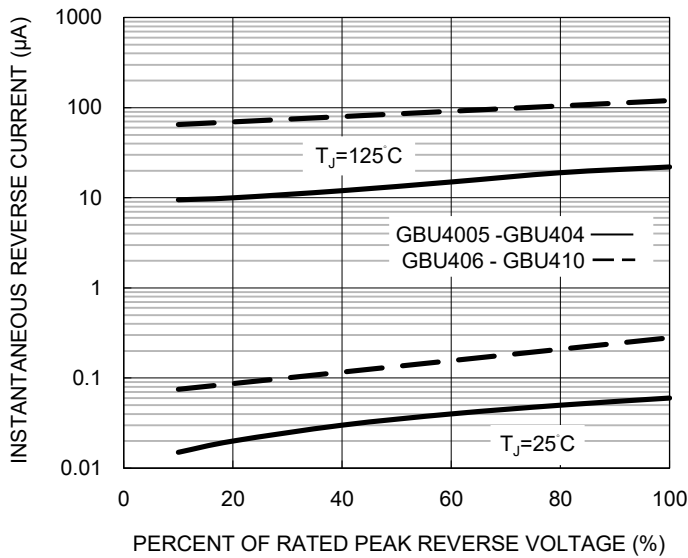
**Fig.1 Forward Current Derating Curve**



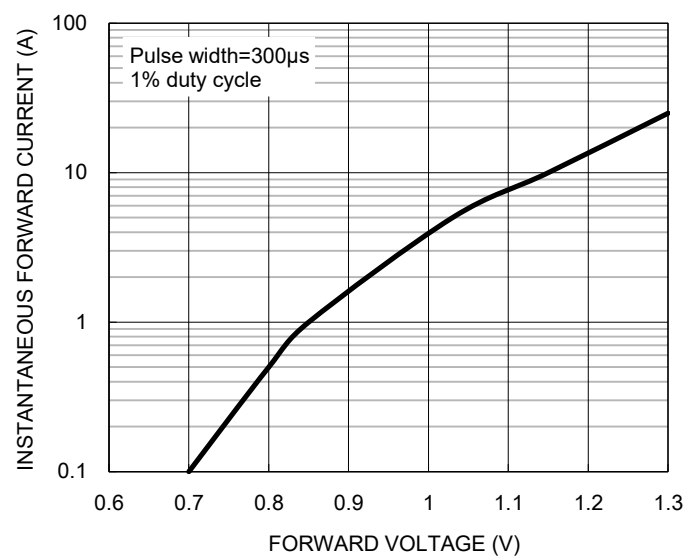
**Fig.2 Typical Junction Capacitance**

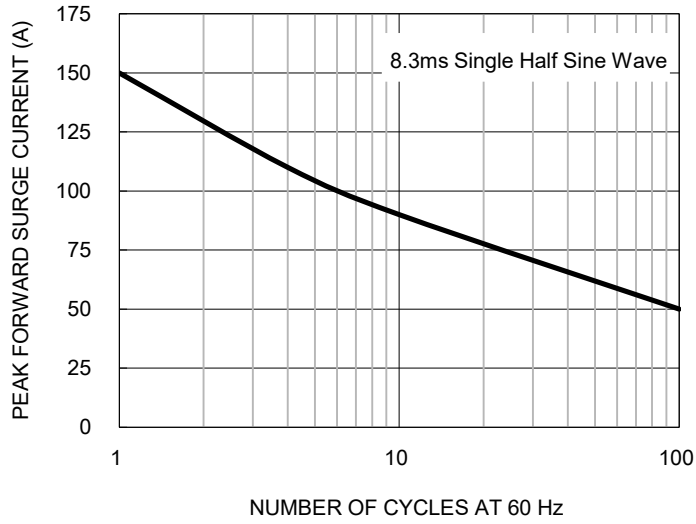


**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



**Fig.5 Maximum Non-repetitive Forward Surge Current**


Device	Package	Shipping
GBU4005--GBU410	GBU	500 Units/Box