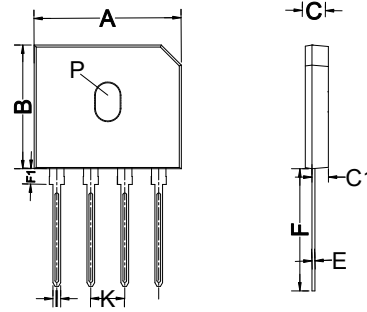


### FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any
- Glass passivated chip junctions

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



GBU		
Dim	Min	Max
A	21.60	22.40
B	18.20	19.80
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.		

Characteristic	Symbol	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	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 Tc=100°C Output current	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	175.0							A
I <sup>2</sup> t Rating for fusing @Tj=25°C	I <sup>2</sup> t	127							A <sup>2</sup> S

### Thermal Characteristics

Characteristic	Symbol	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	UNITS	
Typical junction capacitance per element(note 3)	$C_J$	211				94			p F	
Typical thermal resistance (note2) (note21)	$R_{\theta JA}$ $R_{\theta JC}$	2.2				2.5				°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	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	UNITS	
Maximum instantaneous forward voltage @3.0A @6.0A	$V_F$	1.0				1.1				V
Maximum reverse current @TA=25 °C at rated DC blocking voltage @TA=125 °C	$I_R$	5.0				500				μ A

NOTE: 1. Unit case mounted on 2.6x1.4x0.06" thick (6.5x3.5x0.15cm) Al. Plate.

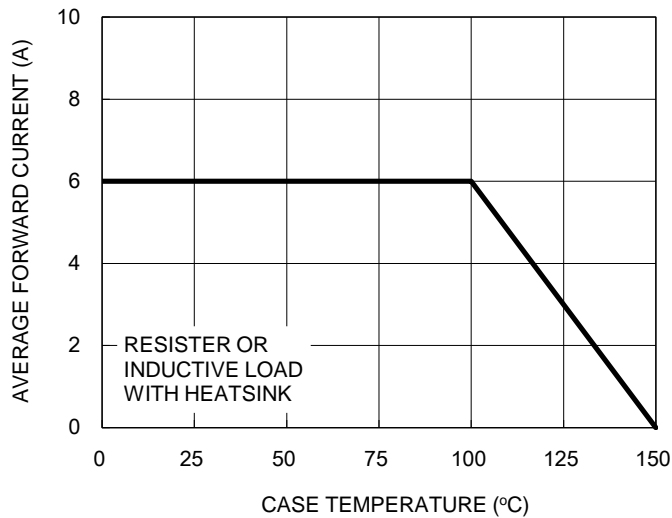
2. Recommended mounting position is to bolt down on heatsink with silicone thermal compound f or maximum heat transfer with #6 screws

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

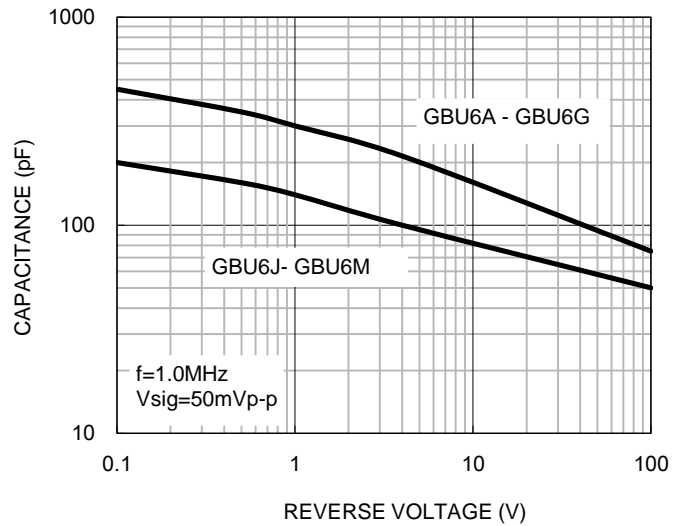
### CHARACTERISTICS CURVES

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

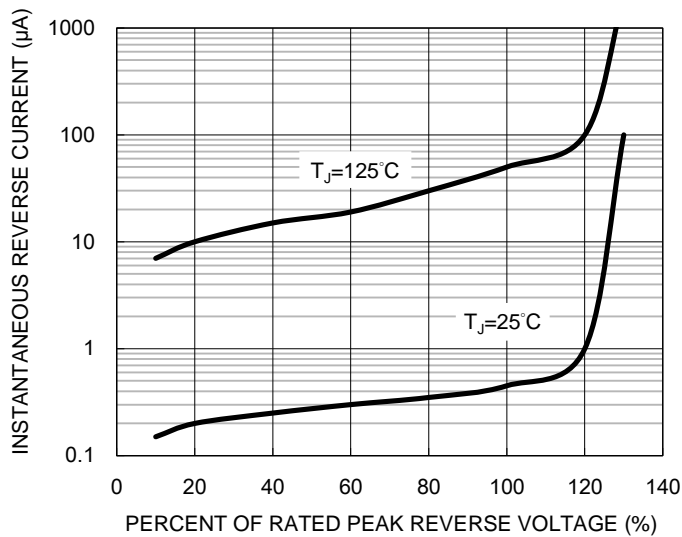
**Fig.1 Forward Current Derating Curve**



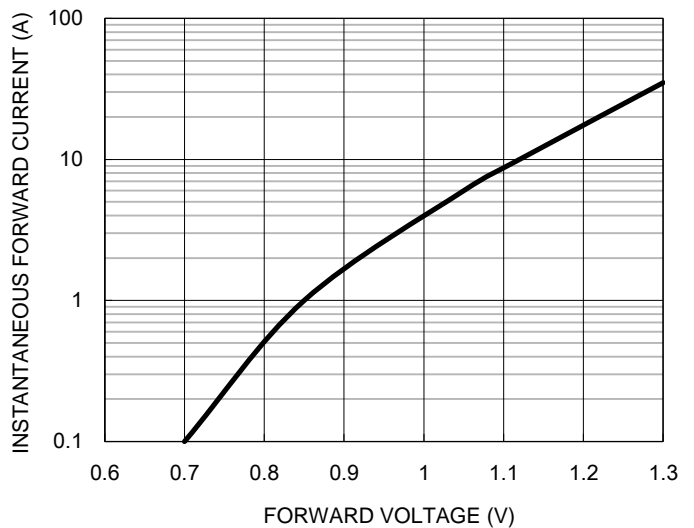
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



### CHARACTERISTICS CURVES

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

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

