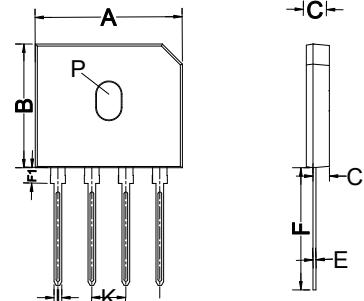



GBU10A-GBU10M
Silicon Bridge Rectifiers


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	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	R1typical	
All Dimensions in mm.		

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

Characteristic	Symbol	GBU10A	GBU10B	GBU10D	GBU10G	GBU10J	GBU10K	GBU10M	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 _c =100°C	I _{F(AV)}	10.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	220							A
I ² t Rating for fusing @T _j =25°C	I ² t	200							A ² S

Thermal Characteristics

Characteristic	Symbol	GBU10A	GBU10B	GBU10D	GBU10G	GBU10J	GBU10K	GBU10M	UNITS
Typical junction capacitance per leg (note 3)	C _J	211				94			
Typical thermal resistance per leg (note 2) (note 1)	R _{θJA}	22				°C/W			
	R _{θJC}	2.0							
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	GBU10A	GBU10B	GBU10D	GBU10G	GBU10J	GBU10K	GBU10M	UNITS
Maximum instantaneous forward voltage @5.0A @10A	V _F	1.0 1.1				V			
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =125°C	I _R	5.0 500				μA			

NOTE: 1. Unit case mounted on 3.2x3.2x0.12" thick (6.2x8.2x0.3cm) Al. Plate

2. Units mounted in free air, no heat sink on P.C.B., 0.5x0.5"(12x12mm) copper pads, 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

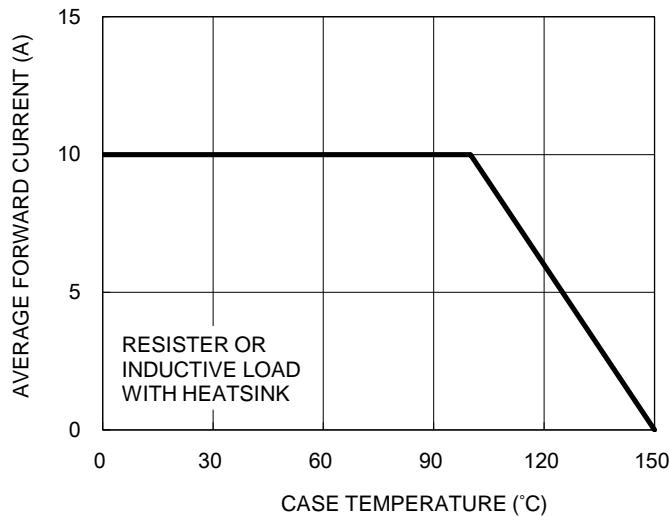


Fig.2 Typical Junction Capacitance

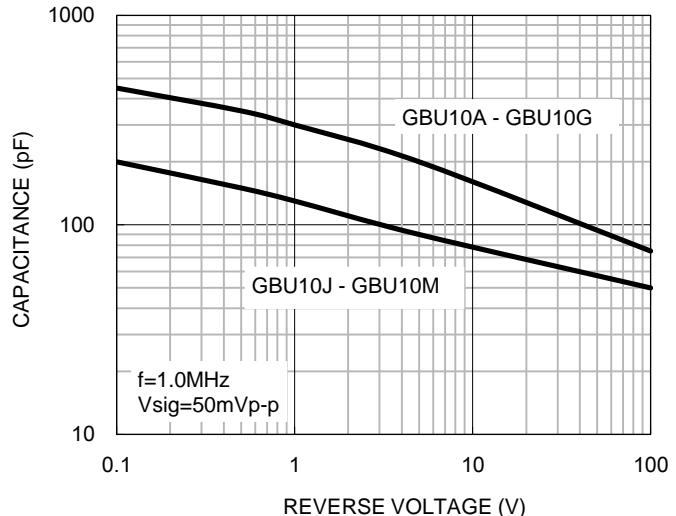


Fig.3 Typical Reverse Characteristics

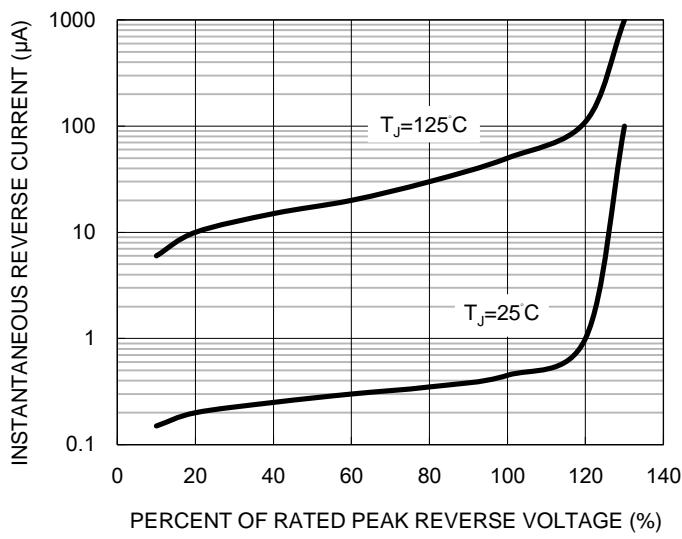
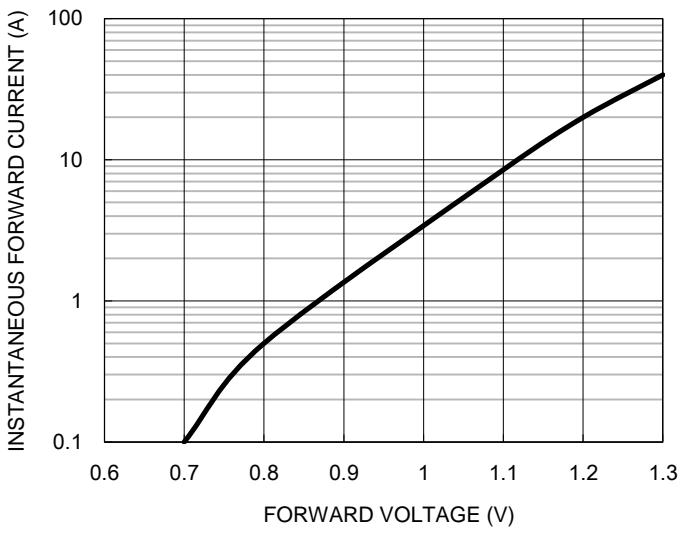
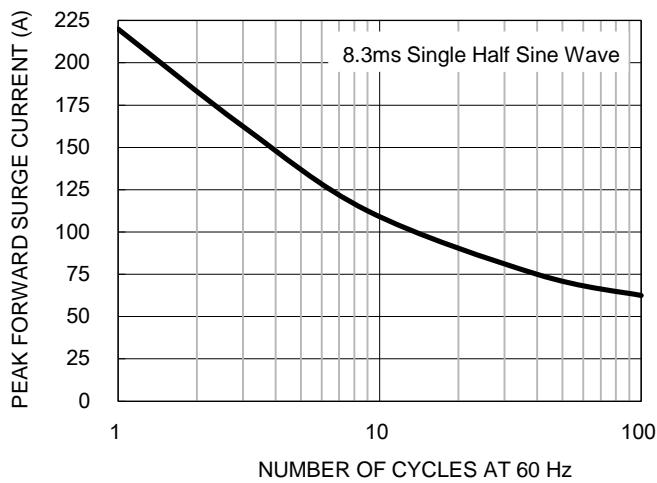


Fig.4 Typical Forward Characteristics



**CHARACTERISTICS CURVES**(T_A = 25°C unless otherwise noted)**Fig.5 Maximum Non-repetitive Forward Surge Current**

Device	Package	Shipping
GBU10A-GBU10M	GBU	500 Units/Box