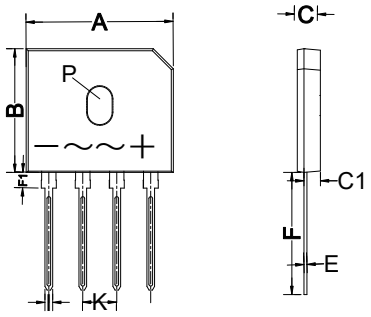
GBU8005-GBU810

Silicon Bridge Rectifiers

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 200 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Glass passivated 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	R1.9typical	
All Dimensions in mm.		

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

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	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℃	$I_{F(AV)}$	8.0							A
Peak forward surge current 8.3ms single half-sine-wav superimposed on rated load	I_{FSM}	200							A
I²t Rating for fusing @Tj=25℃	I²t	166							A²S

Thermal Characteristics

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	UNITS
Typical junctionp capacitance per element(note 3)	C_J	211				94			p F
Typical thermal resistance (note2) (note1)	$R_{\theta JA}$ $R_{\theta JC}$	2 2 1.6							℃/W
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

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

Characteristic	Symbol	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	UNITS
Maximum instantaneous forward voltage @4.0A @8.0A	V_F	1.0 1.1							V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	5.0 0.5							μ A mA

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°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

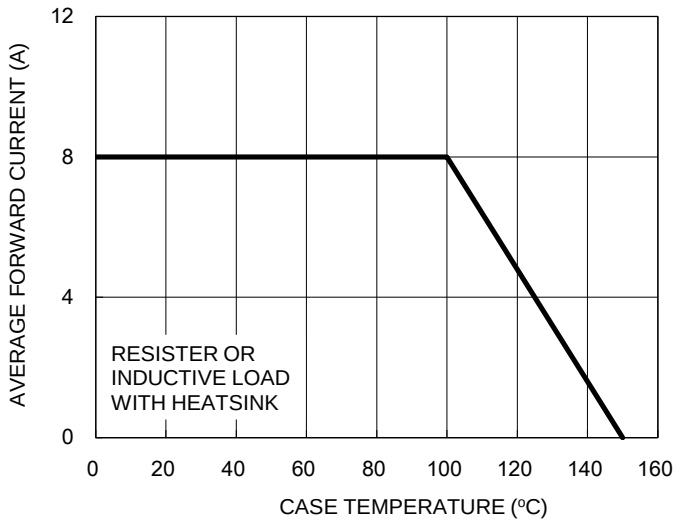


Fig.2 Typical Junction Capacitance

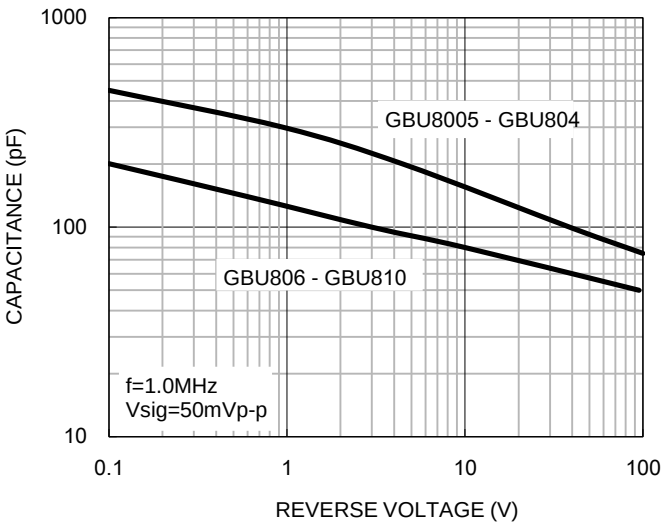


Fig.3 Typical Reverse Characteristics

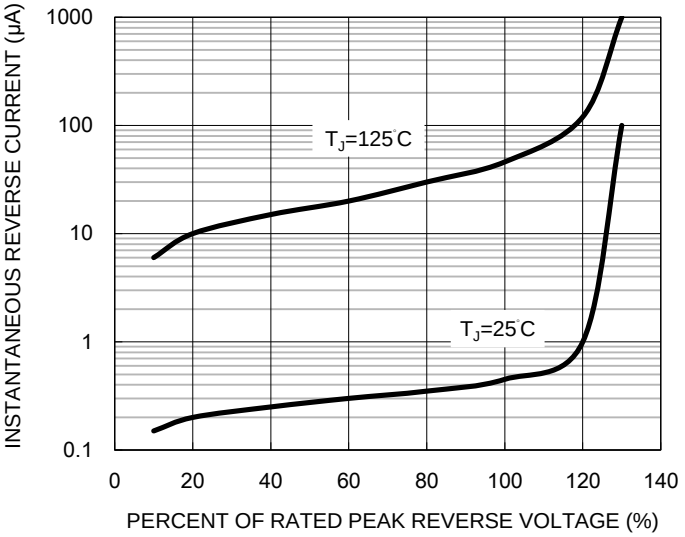
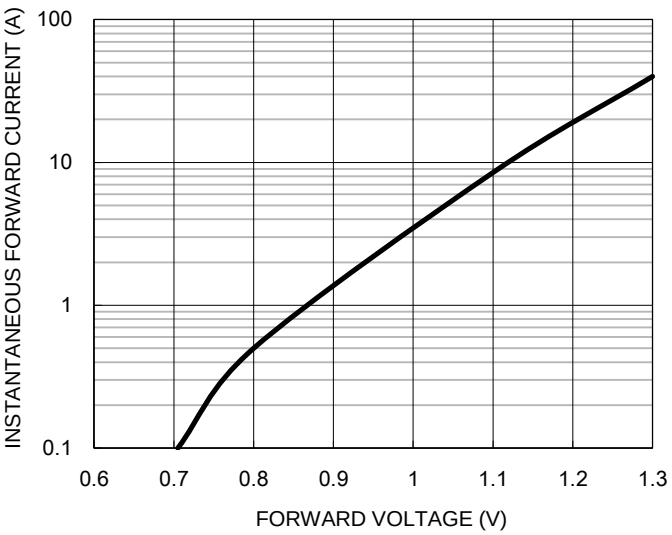


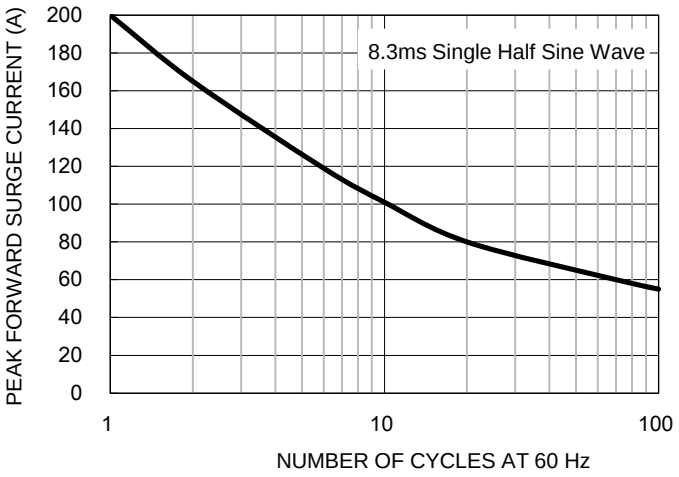
Fig.4 Typical Forward Characteristics



CHARACTERISTICS CURVES

(T_A = 25°C unless otherwise noted)

Fig.5 Maximum Non-repetitive Forward Surge Current



Device	Package	Shipping
GBU8005--GBU810	GBU	500 Units/Box