

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.		

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

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

Characteristic	Symbol	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	GBU2512	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	1200	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	840	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	1200	V
Maximum average forward Output current @T _C =100°C	$I_{F(AV)}$	25							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	300							A
I ² t Rating for fusing @T _J =25°C	I ² t	9373							A ² S

Thermal Characteristics

Characteristic	Symbol	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	GBU2512	Uint
Typical junction capacitance per leg (note 3)	C _J	211				94			p F
Typical thermal resistance per leg (note 2) (note 1)	R _{θJA} R _{θJC}	2.2 7.0							°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	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	GBU2512	Unit
Maximum instantaneous forward voltage @12.5A	V _F	1.1							V
Maximum reverse current @TA=25 °C at rated DC blocking voltage @TA=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.

FIG.1 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

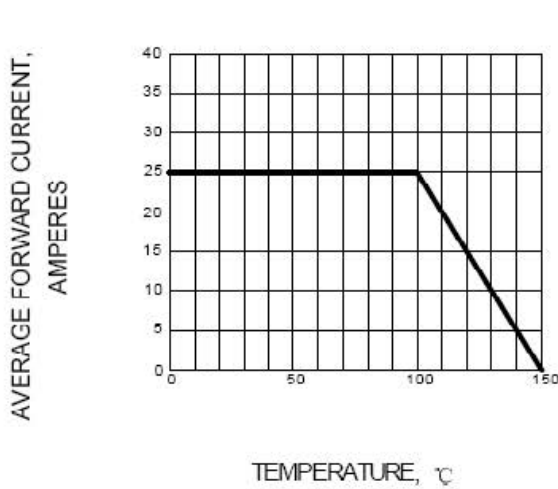


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

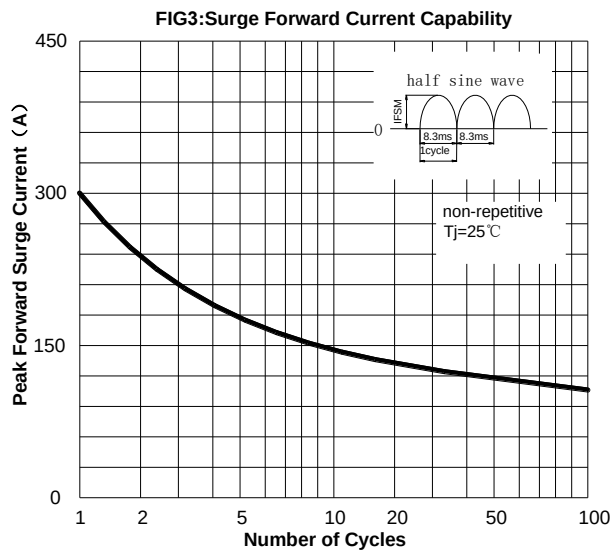
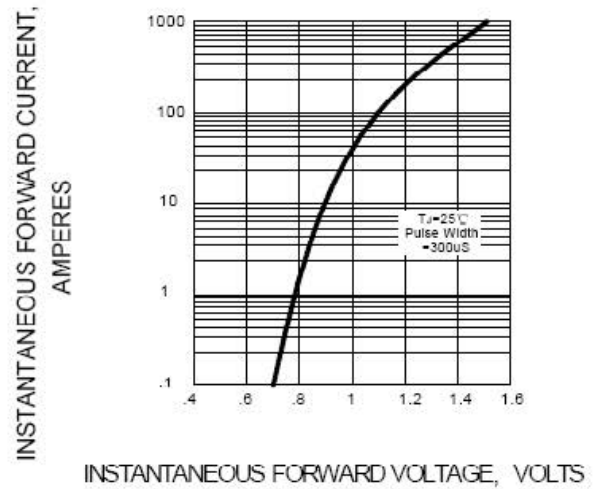


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

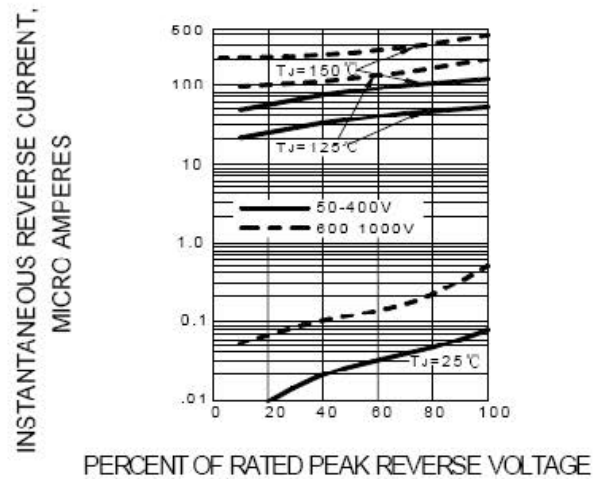


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER LEG

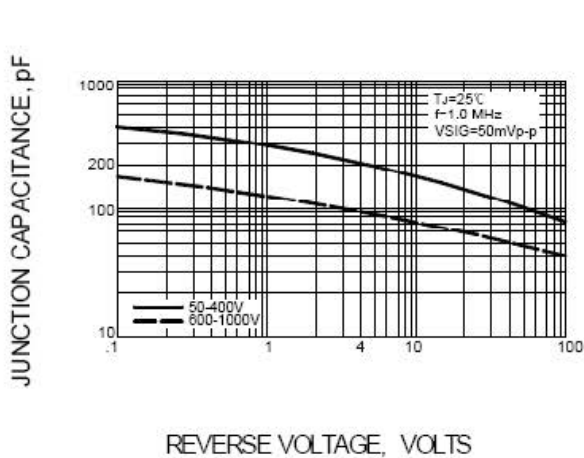
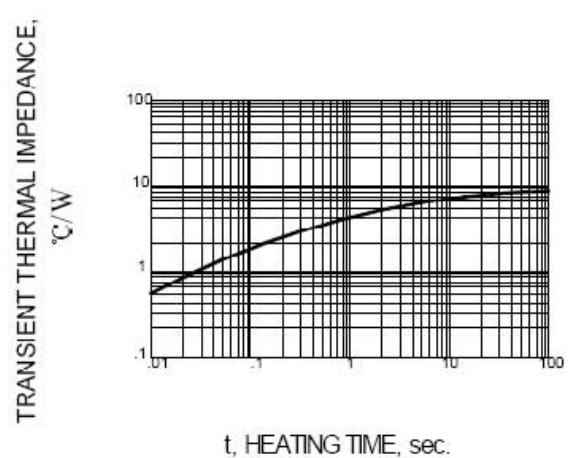


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE



Device	Package	Shipping
GBU2501-GBU2512	GBU	500 Units/Box