LITE-ON SEMICONDUCTOR

GBU1004 thru GBU1010

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 400** to **1000** Volts
FORWARD CURRENT **- 10** Amperes

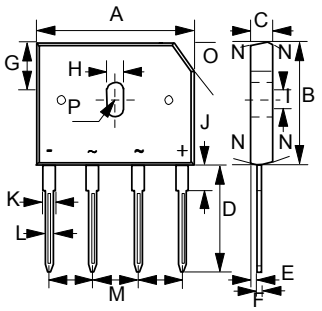
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.15 ounces, 4.0 grams
- Mounting position : Any

GBU



GBU		
DIM.	MIN.	MAX.
A	21.80	22.30
B	18.30	18.80
C	3.30	3.56
D	17.50	18.00
E	0.76	1.00
F	0.46	0.56
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	1.95	2.35
L	1.02	1.27
M	4.83	5.33
N	7.0° TYPICAL	
O	3.2 x 45°	
P	1.90 RADIUS	
All Dimensions in millimeter		

Datasheet.Directory

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBU 1004	GBU 1006	GBU 1008	GBU 1010	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @T_C=100°C (without heatsink)	$I_{(AV)}$	10 3.2				A
Peak Forward Surge Current @T_J =25°C 8.3ms single half sine-wave @T_J =125°C	I_{FSM}	240 220				A
Peak Forward Surge Current @T_J =25°C 1.0ms single half sine-wave @T_J =125°C	I_{FSM}	480 440				A
Maximum forward Voltage at 5.0A DC Maximum forward Voltage at 10A DC	V_F	1.0 1.2				V
Maximum DC Reverse Current @T_J =25°C at Rated DC Blocking Voltage @T_J =125°C	I_R	5.0 500				uA
I^2t Rating for fusing (3ms ≦ t ≦ 8.3m)	I^2t	200				A^2S
Typical Junction Capacitance per element (Note 1)	C_J	60				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0				°C/W
Mounting Torque (Recommended torque: 0.5 N.m)	TOR	0.8				N.m
Operating Temperature Range	T_J	-55 to +150				℃
Storage Temperature Range	T_{STG}	-55 to +150				℃

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES
GBU1004 thru GBU1010

FIG.1 - FORWARD CURRENT DERATING CURVE

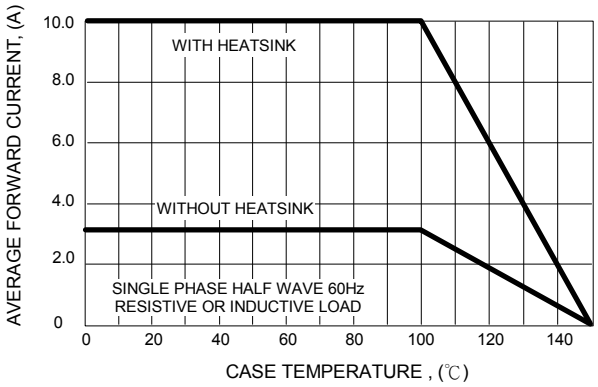


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

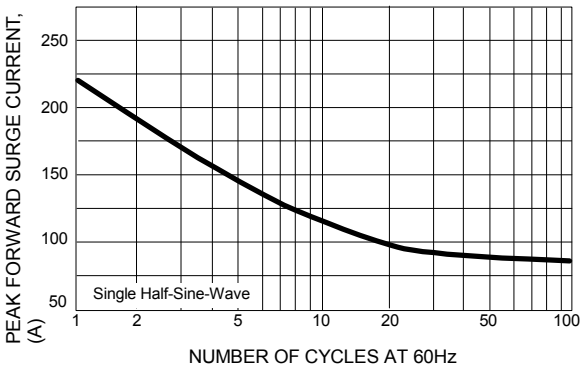


FIG.3 - TYPICAL JUNCTION CAPACITANCE

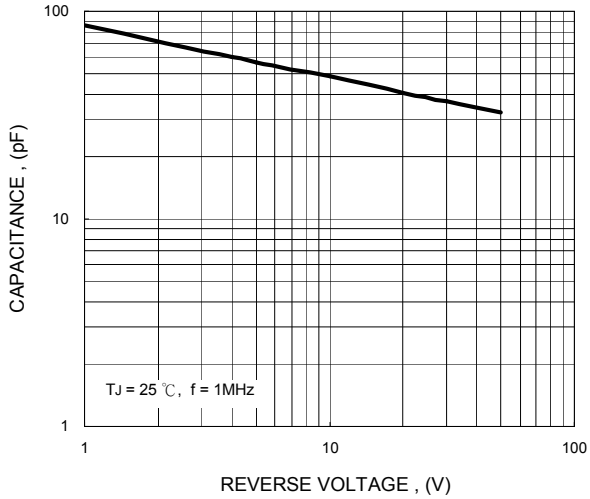


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

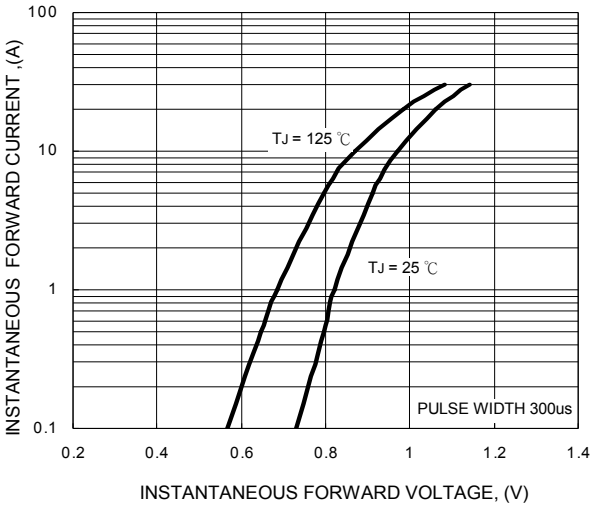


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

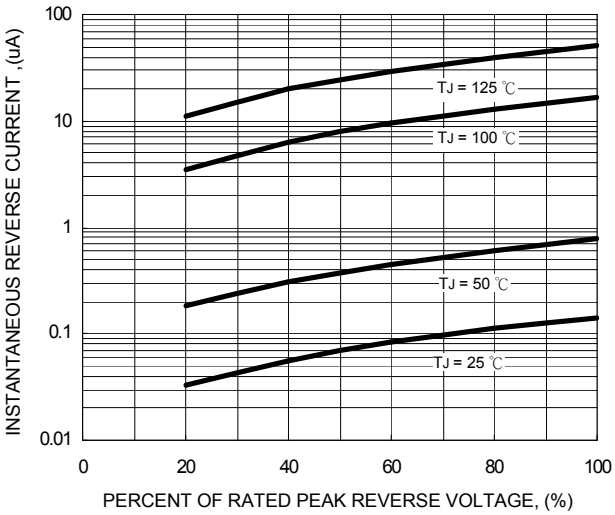
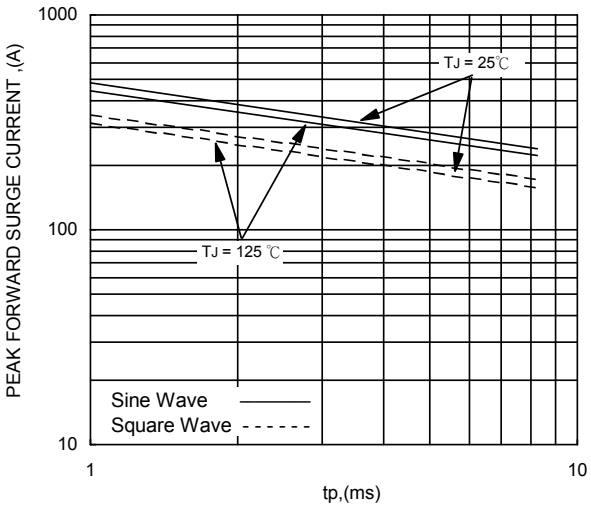


FIG.6 - NON-REPETITIVE SURGE CURRENT



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