

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 400 to 1000 Volts
FORWARD CURRENT - 8.0 Amperes

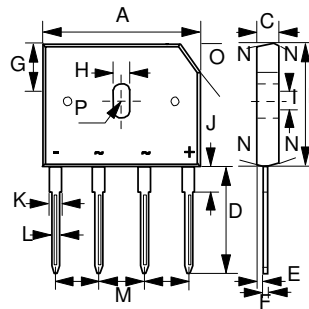
FEATURES

- 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 : Symbols molded 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBU 804	GBU 806	GBU 808	GBU 810	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	400	600	800	1000	V
Maximum RMS Voltage	VRMS	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @Tc=100°C (without heatsink)	I(AV)	8.0			3.2	A
Peak Forward Surge Current @Tj =25°C	IFSM	220			200	A
8.3ms single half sine-wave @Tj =125°C						
Peak Forward Surge Current @Tj =25°C	IFSM	440			400	A
1.0ms single half sine-wave @Tj =125°C						
Maximum forward Voltage at 4.0A DC	VF	1.0				V
Maximum forward Voltage at 8.0A DC		1.2				
Maximum DC Reverse Current @Tj =25°C	IR	5.0				uA
at Rated DC Blocking Voltage @Tj =125°C		500				
I ² t Rating for fusing (3ms ≤ t ≤ 8.3m)	I ² t	166				A ² S
Typical Junction Capacitance per element (Note 1)	CJ	60				pF
Typical Thermal Resistance (Note 2)	RθJA	8.0				°C/W
	RθJL	3.0				
	RθJC	2.2				
Typical Thermal Resistance (without heatsink)	RθJC	5.6				°C/W
Operating Temperature Range	TJ	-55 to +150				°C
Storage Temperature Range	TSTG	-55 to +150				°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

FIG.1 - FORWARD CURRENT DERATING CURVE

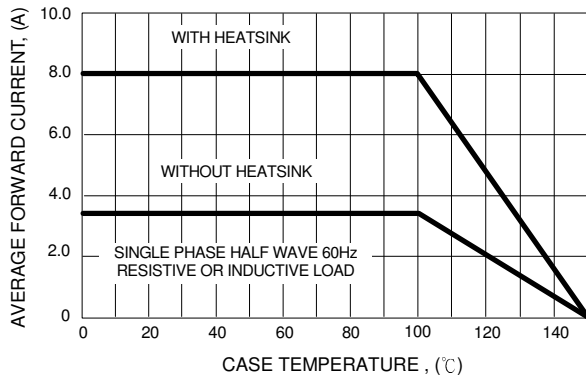


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

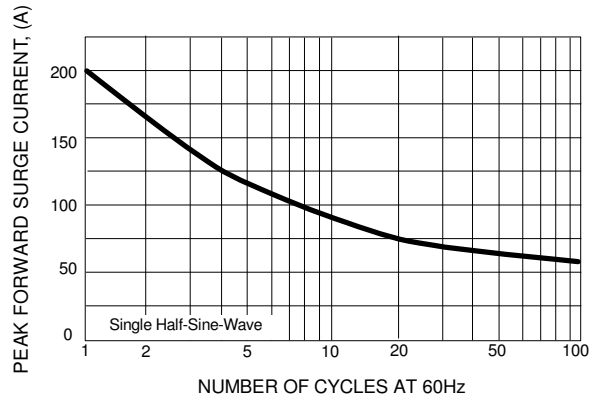


FIG.3 - TYPICAL JUNCTION CAPACITANCE

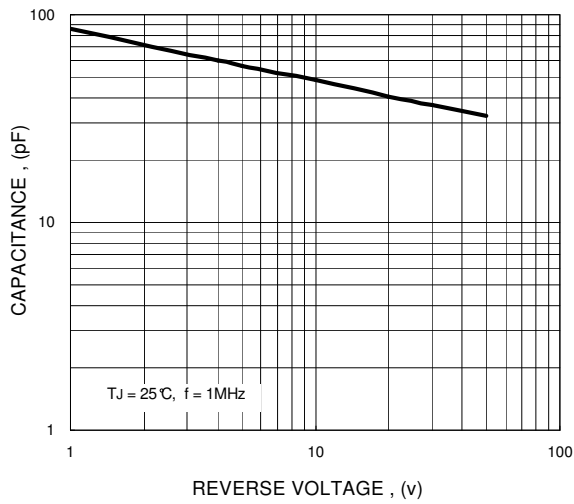


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

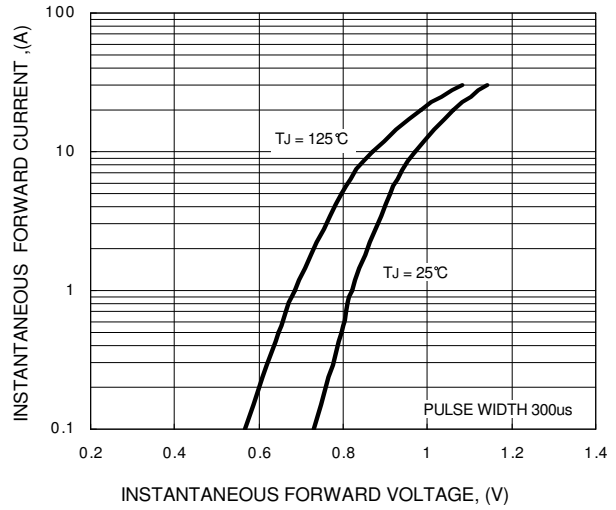


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

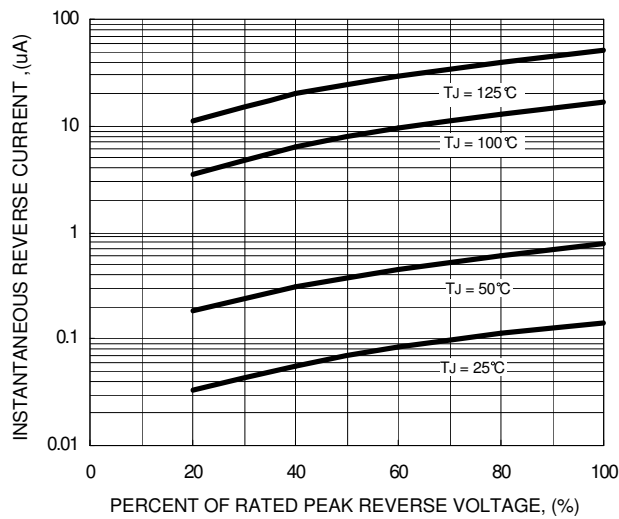
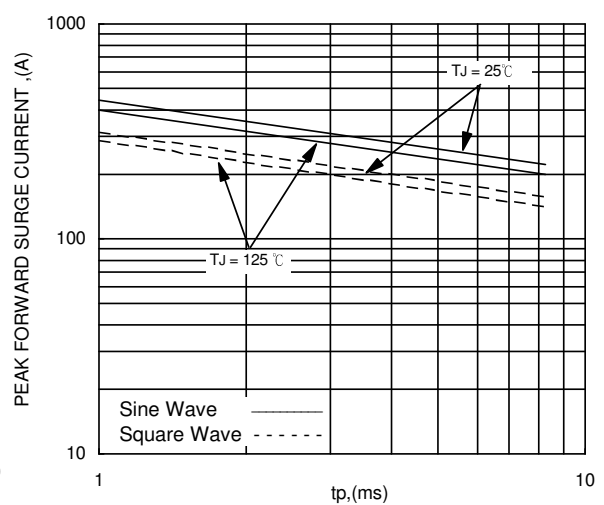


FIG.6 - NON-REPETITIVE SURGE CURRENT



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.