LITE-ON SEMICONDUCTOR

GBL404 thru GBL406

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 400 to 600** Volts
FORWARD CURRENT **- 4.0** Amperes

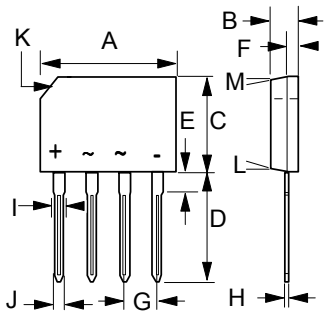
FEATURES

- Rating to 600V 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 : 0.09 ounces, 2.52 grams
- Mounting position : Any

GBL



GBL		
DIM.	MIN.	MAX.
A	20.2	20.8
B	3.30	3.70
C	10.70	11.30
D	17.50	18.00
E	2.30	2.70
F	0.80	1.20
G	4.83	5.33
H	0.40	0.60
I	1.95	2.35
J	1.02	1.27
K	3.5 Typ.	
L	-	5°
M	-	5°
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBL404	GBL406	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	V
Maximum RMS Voltage	V_{RMS}	280	420	V
Maximum DC Blocking Voltage	V_{DC}	400	600	V
Maximum Average Forward Rectified Current @TC =100℃ with Heatsink / without Heatsink	$I_{(AV)}$	4.0 2.4		A
Peak Forward Surge Current 8.3ms single half sine-wave @TJ =25 ℃ / @TJ =125℃	I_{FSM}	150 135		A
Peak Forward Surge Current 1.0ms single half sine-wave @TJ =25 ℃ / @TJ =125℃	I_{FSM}	360 330		A
Maximum forward Voltage at 2.0A DC	V_F	1		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25 ℃ / @TJ =125℃	I_R	5 500		uA
I^2t Rating for fusing (3ms≦t ≦ 8.3ms)	I^2t	93		A^2S
Typical Junction Capacitance per element (Note 1)	C_J	35		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	4.2 4.0 10.0		°C/W
Operating Temperature Range	T_J	-55 to +150		℃
Storage Temperature Range	T_{STG}	-55 to +150		℃

NOTE : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
2.Unit Mounted on 50 x 50 x 1.6 mm Cu Plate Heatsink.

REV.12, Sep-2012, KBDQ03

FIG.1 - FORWARD CURRENT DERATING CURVE

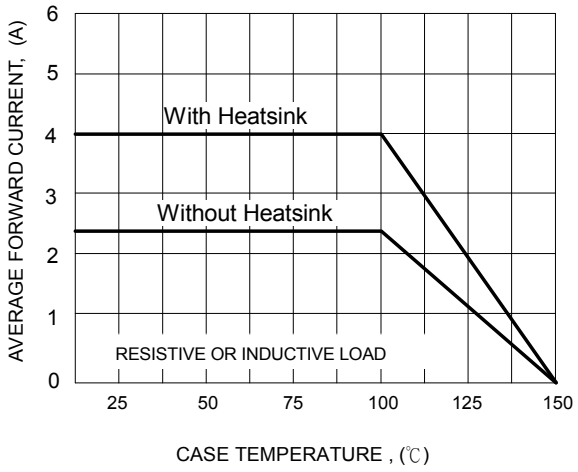


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

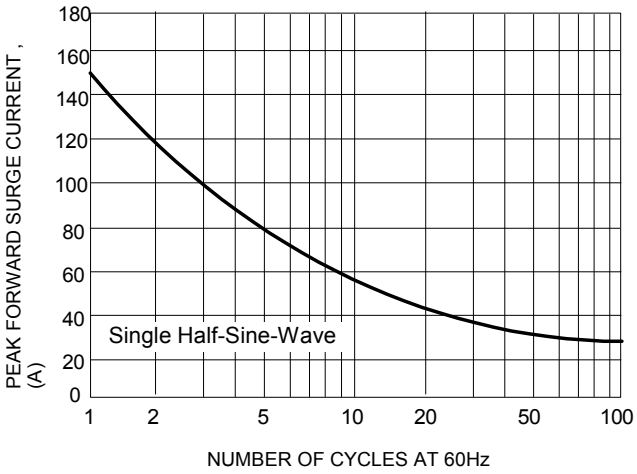


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

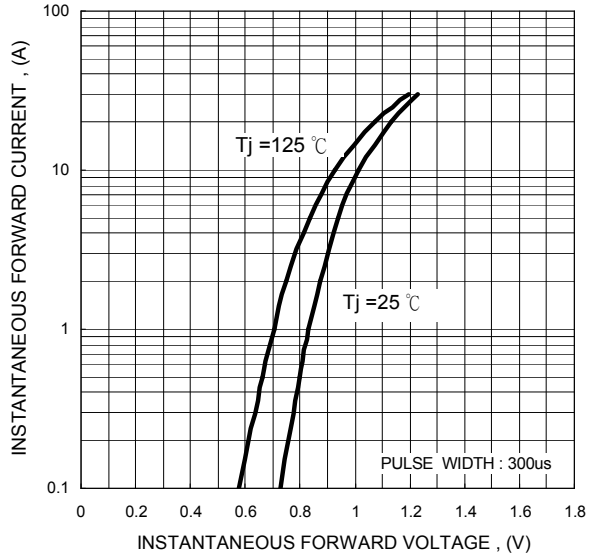


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

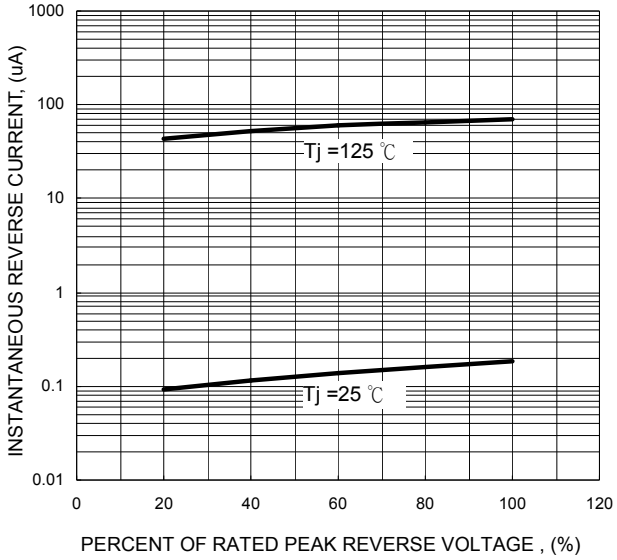


FIG.5 - TYPICAL JUNCTION CAPACITANCE

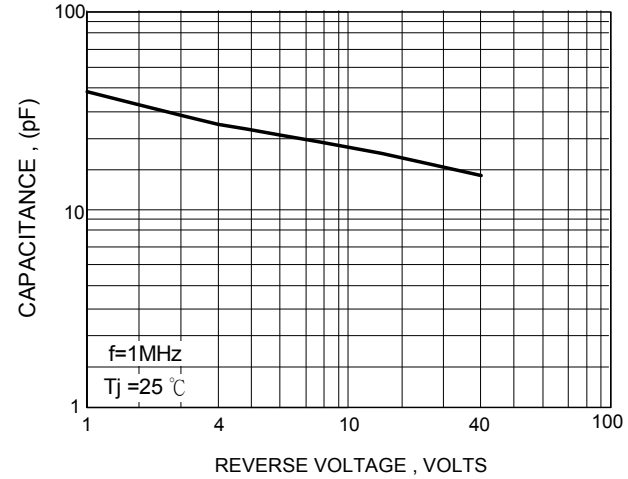
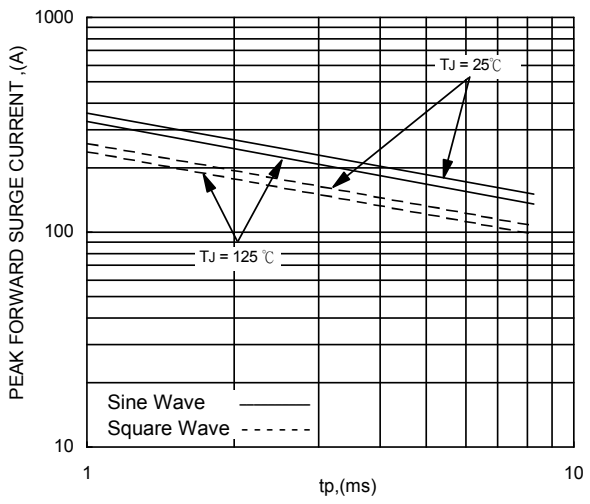


FIG.6 - NON-REPETITIVE SURGE CURRENT



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