

**GLASS PASSIVATED BRIDGE RECTIFIERS**

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

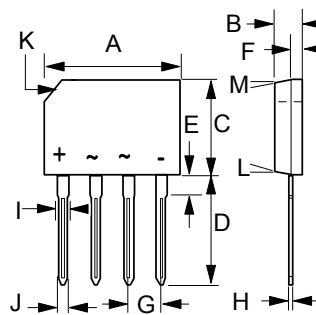
**FEATURES**

- 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°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBL404	GBL406	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	V
Maximum Average Forward Rectified Current @TC =100°C	I <sub>(AV)</sub>	4.0	4.0	A
Peak Forward Surge Current 8.3ms single half sine-wave @T <sub>J</sub> =25 °C	I <sub>FSM</sub>	150	150	A
Peak Forward Surge Current 1.0ms single half sine-wave @T <sub>J</sub> =125°C	I <sub>FSM</sub>	135	135	A
Maximum forward Voltage at 2.0A DC	V <sub>F</sub>	1	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25 °C	I <sub>R</sub>	5	5	uA
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	500	500	uA
I <sup>2</sup> t Rating for fusing (3ms ≤ t ≤ 8.3ms)	I <sup>2</sup> t	93	93	A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	C <sub>J</sub>	35	35	pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub> R <sub>θJL</sub> R <sub>θJA</sub>	4.2 4.0 10.0	4.2 4.0 10.0	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	-55 to +150	°C

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

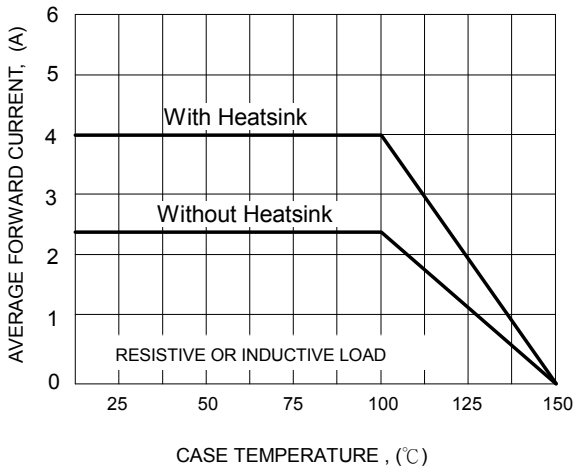


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

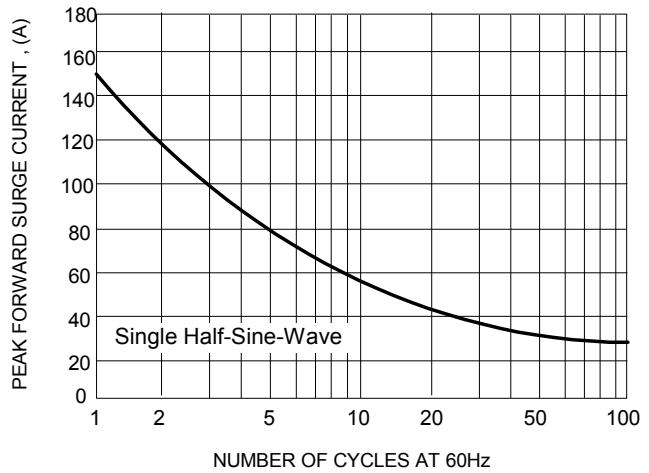


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

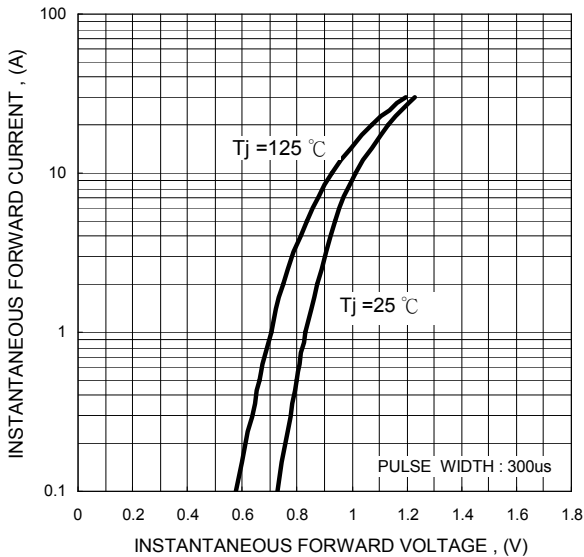


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

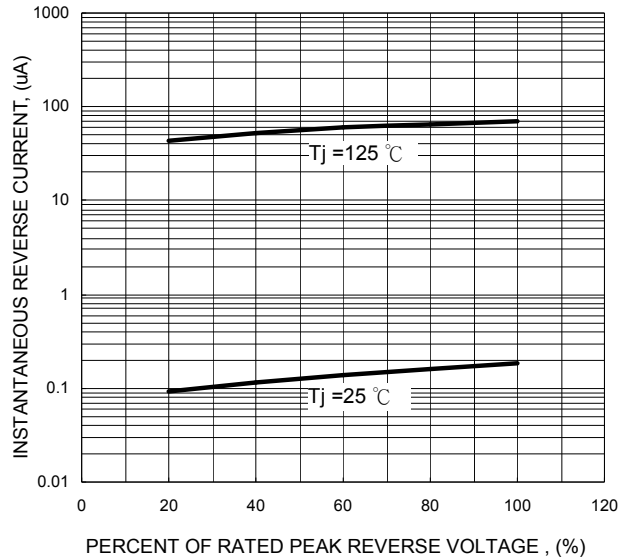


FIG.5 - TYPICAL JUNCTION CAPACITANCE

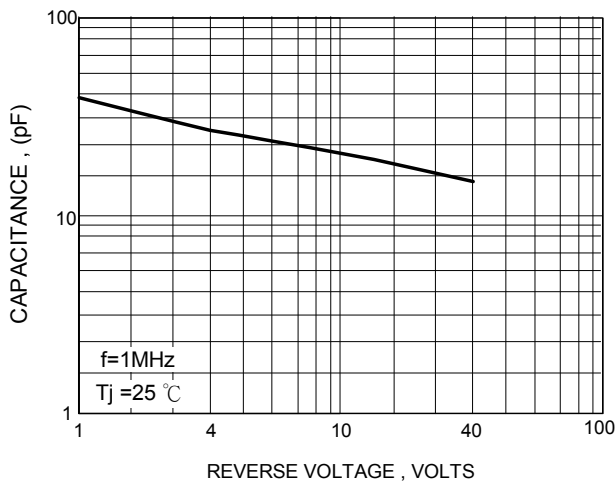
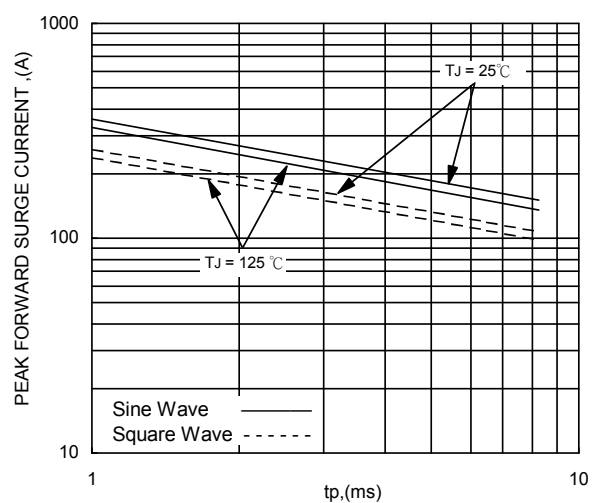


FIG.6 - NON-REPETITIVE SURGE CURRENT



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