

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **-50 to 600** Volts
FORWARD CURRENT **- 4.0** Amperes

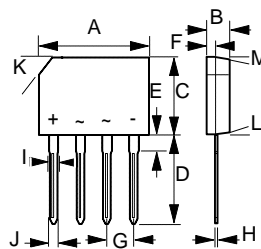
FEATURES

- 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 : As marked on body
- Weight : 0.06 ounces, 2.2 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	3.2 x 45°	
L	-	5°
M	-	5°

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25° ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBL4005	GBL401	GBL402	GBL404	GBL406	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T _A =25°C with Heatsink without Heatsink	I _(AV)				4.0 2.8	A	
Peak Forward Surge Current 8.3ms single half sine-wave @ T _A =25°C	I _{FSM}				150	A	
Maximum forward Voltage at 2.0A DC	V _F				1	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =125°C	I _R				5 500	uA	
I ² t Rating for fusing (t < 8.3ms)	I ² t				93	A ² S	
Typical Junction Capacitance per element (Note 1)	C _J				35	pF	
Typical Thermal Resistance (Note 2)	R _{θJC}				4.2	°C/W	
Operating Temperature Range	T _J				-55 to +150	°C	
Storage Temperature Range	T _{STG}				-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.

FIG.1 - FORWARD CURRENT DERATING CURVE

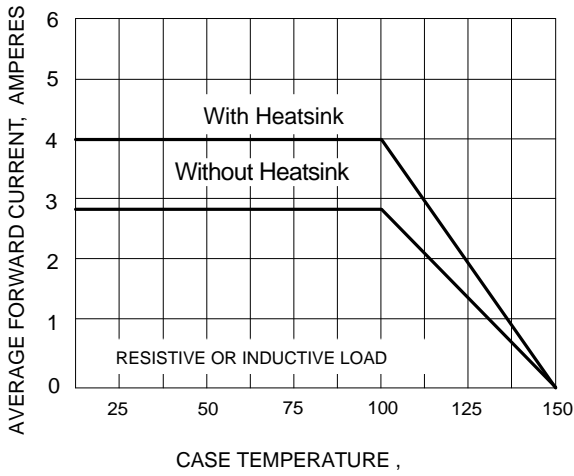


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

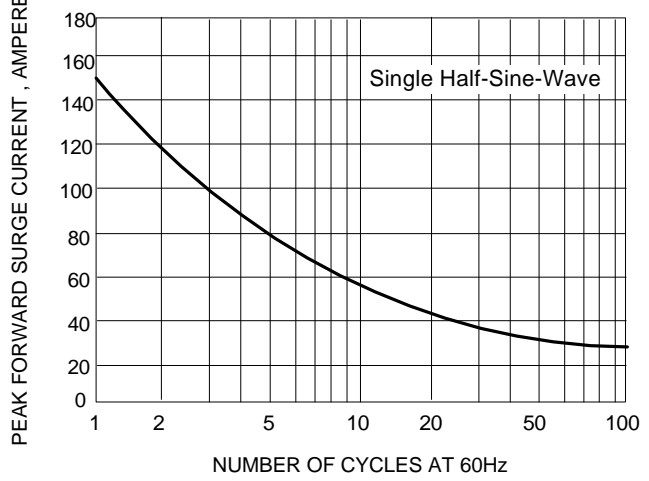


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

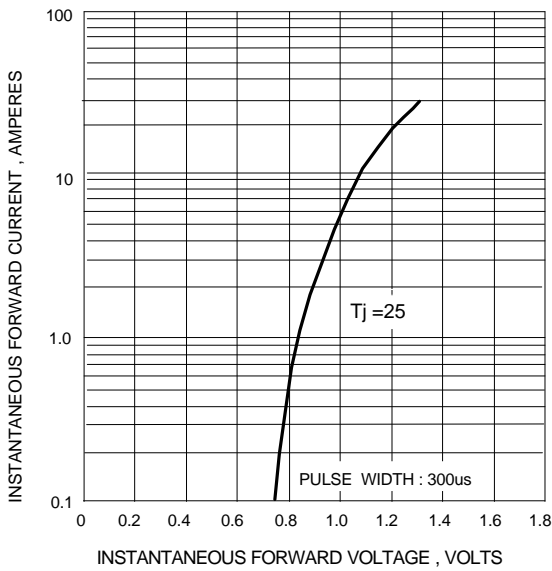


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

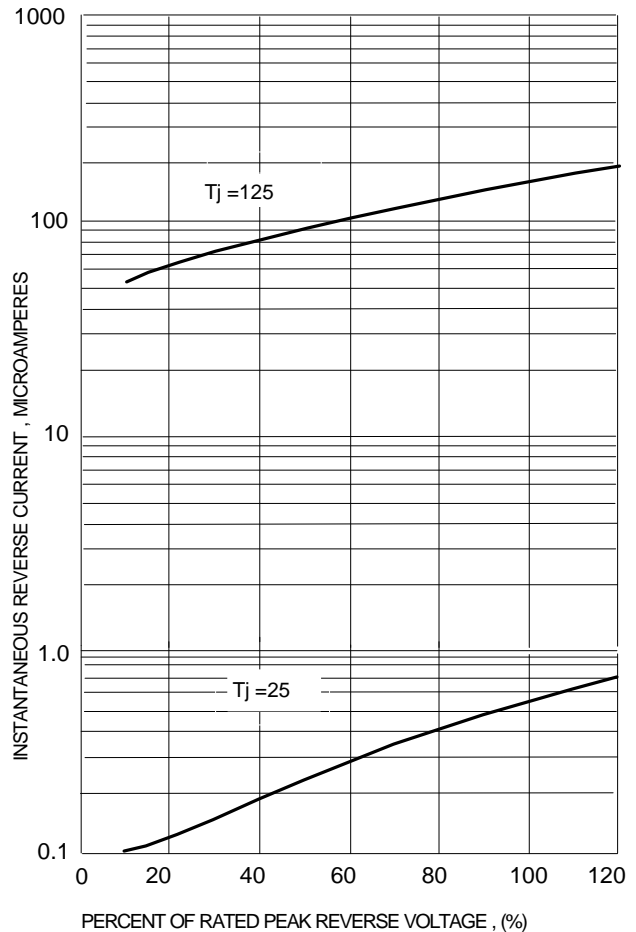


FIG.5 - TYPICAL JUNCTION CAPACITANCE

