

**GLASS PASSIVATED BRIDGE RECTIFIERS**

REVERSE VOLTAGE - **400 to 1000** Volts  
FORWARD CURRENT - **4.0** Amperes

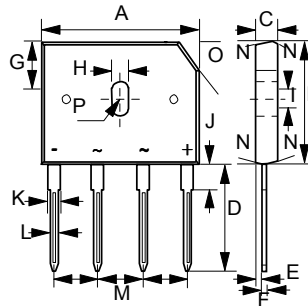
**FEATURES**

- 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 : 0.15 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

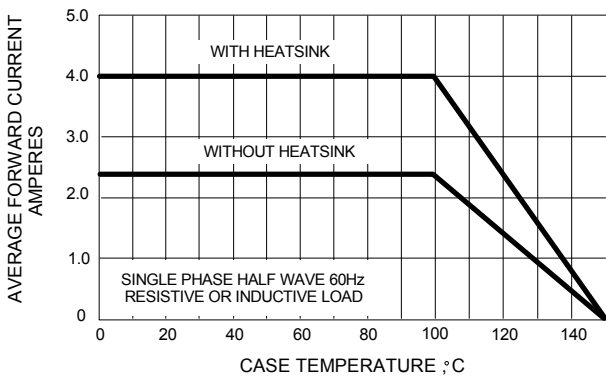
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

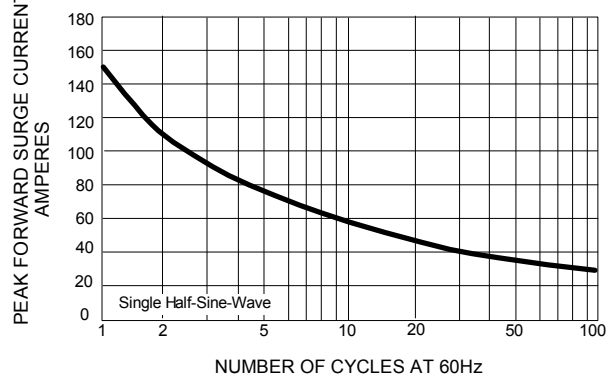
CHARACTERISTICS	SYMBOL	GBU 404	GBU 406	GBU 408	GBU 410	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>c</sub> =100°C (without heatsink)	I <sub>(AV)</sub>	4.0				A
Peak Forward Surge Current (Non-repetitive)	I <sub>FSM</sub>	2.4				A
8.3ms single half sine-wave superimposed on rated load T <sub>j</sub> =25°C T <sub>j</sub> =125°C		160 150				
1ms square wave	I <sub>FSM</sub>	320 300				A
T <sub>j</sub> =25°C T <sub>j</sub> =125°C						
Maximum forward Voltage at 2.0A DC	V <sub>F</sub>	1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0 500				uA
@T <sub>J</sub> =25°C @T <sub>J</sub> =125°C						
I <sup>2</sup> t Rating for fusing (3ms ≤ t ≤ 8.3ms)	I <sup>2</sup> t	93				A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	C <sub>J</sub>	40				pF
Typical Thermal Resistance (Note 2)	R <sub>θ JC</sub> R <sub>θ JA</sub> R <sub>θ JL</sub>	3.0 15 3.0				°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150				°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150				°C

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

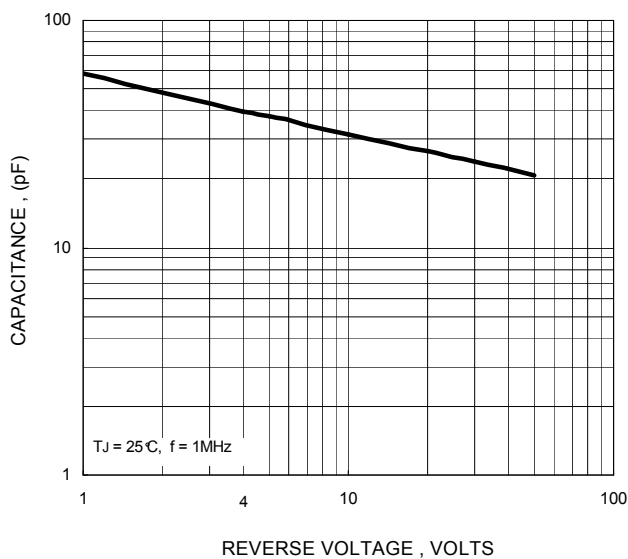
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



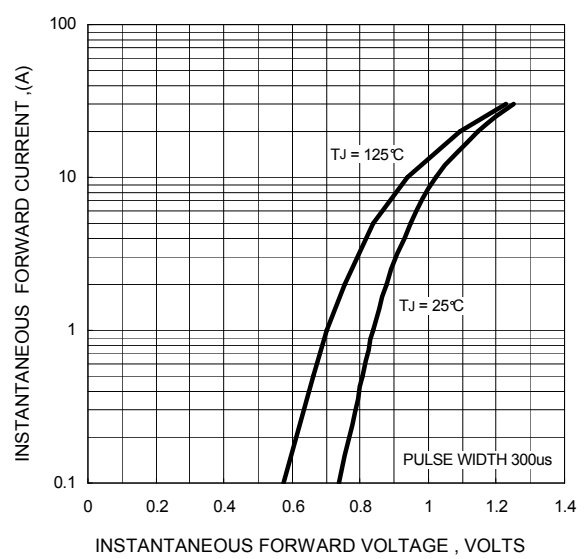
**FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



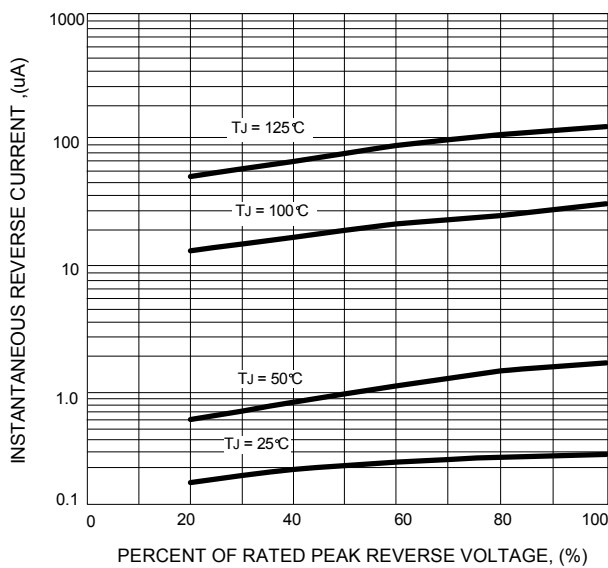
**FIG. 3 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG. 5 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 6 - NON-REPETITIVE SURGE CURRENT**

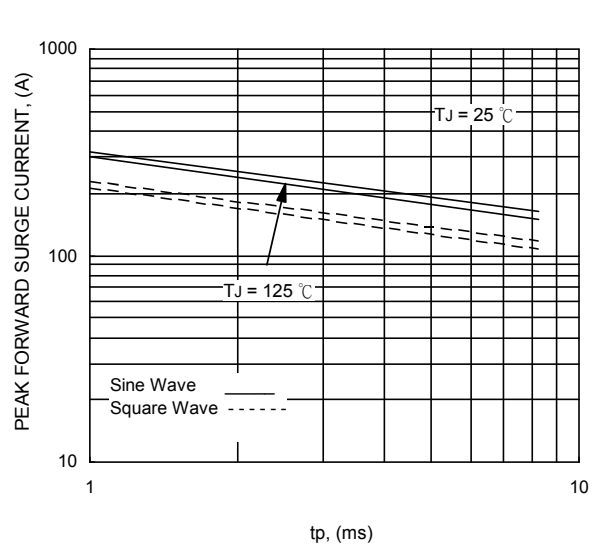
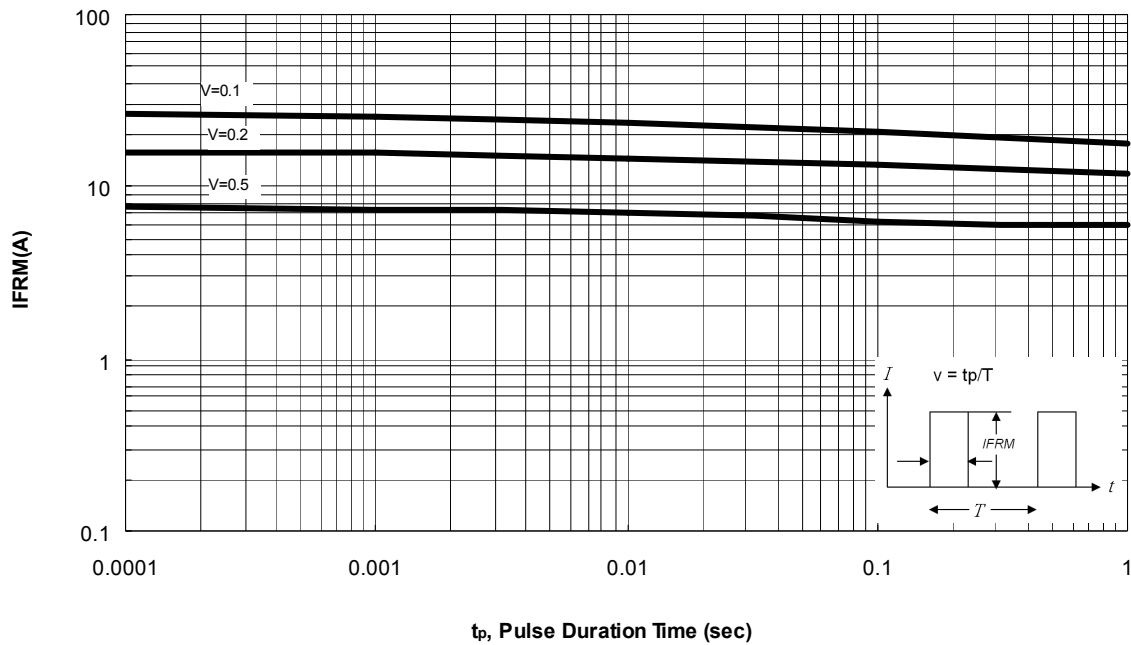


FIG.7 - Admissible Repetitive Peak Forward Current vs. Pulse Duration



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