

## High Current Glass Passivated Molding Single-Phase Bridge Rectifier

 Lead(Pb)-Free

### Features:

- \* Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- \* High current capacity with small package
- \* Glass passivated chip junctions
- \* Superior thermal conductivity
- \* High IFSM

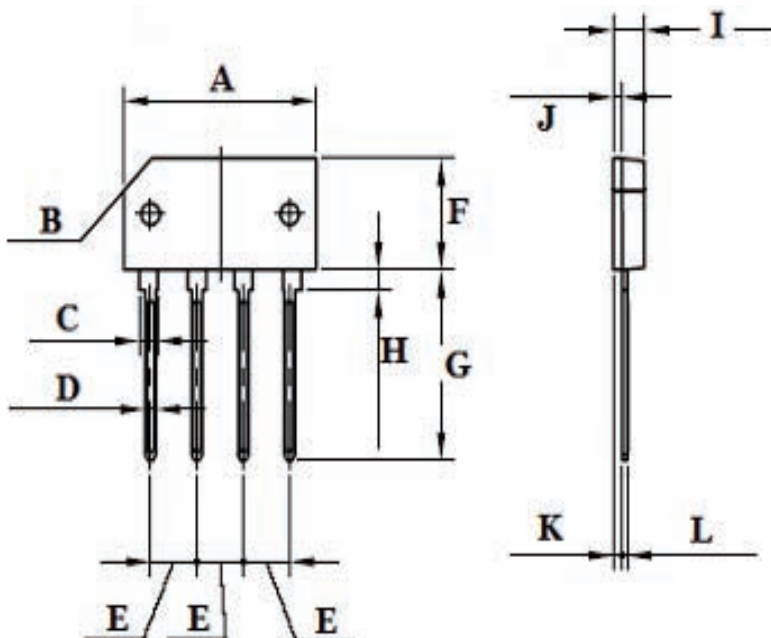
**REVERSE VOLTAGE**  
**100 TO 1000 VOLTS**  
**FORWARD CURRENT**  
**4.0 AMPERE**



**GBL**

## GBL Outline Dimension

Unit:mm



Dim	Min	Max
A	20.4	21.0
B	3x45°	-
C	1.80	2.20
D	0.90	1.30
E	4.80	5.20
F	10.2	10.8
G	17.37	18.37
H	1.37	2.37
I	3.20	3.60
J	0.80	1.20
K	0.80	1.20
L	0.30	0.70

**MAXIMUM RATINGS** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Characteristics	Symbol	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410	Unit
Maximum Repetitive Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Forward Current @ $T_c = 50^{\circ}\text{C}$ 60Hz Sine Wave Resistance Load @ $T_a = 40^{\circ}\text{C}$	$I_o$	4 3						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	150						A
Max instantaneous forward voltage at 2.0A	$V_F$	1.1						V
Maximum DC Reverse Current @ $T_a = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_a = 100^{\circ}\text{C}$	$I_R$	5 500						$\mu\text{A}$
Rating Of Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	93						A2sec
Dielectric Strength Terminals To Case , AC 1 Minute Current 1mA	$V_{dia}$	2.5						KV
Maximum Thermal On P.C.B. Without Heat-Sink	$R_{\theta JA}$	32						$^{\circ}\text{C}/\text{W}$
Resistance Per Leg On Al Plate Heat-Sink	$R_{\theta JC}$	8						$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature	$T_J$	150						$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150						$^{\circ}\text{C}$

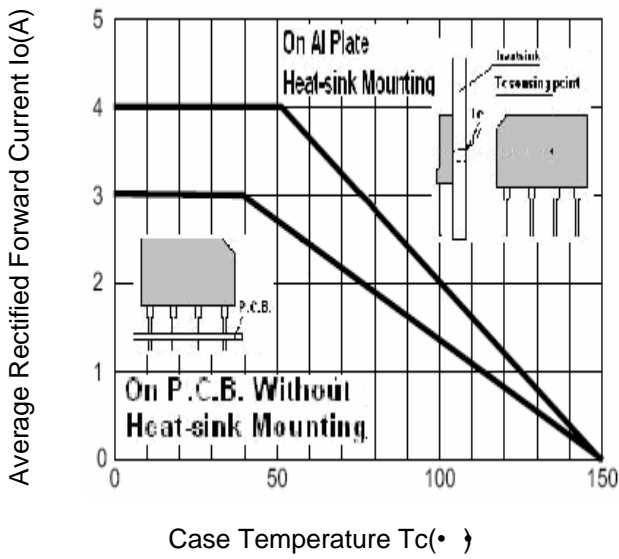


Fig. 1 Derating Curve

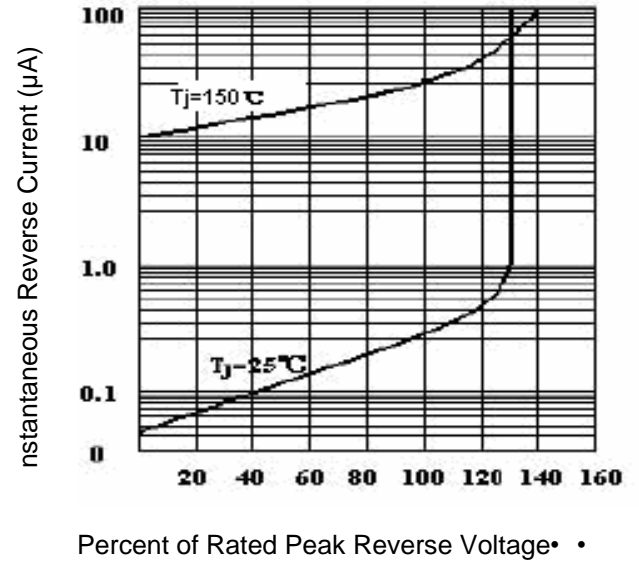


Fig. 2 Typical Reverse Characteristics

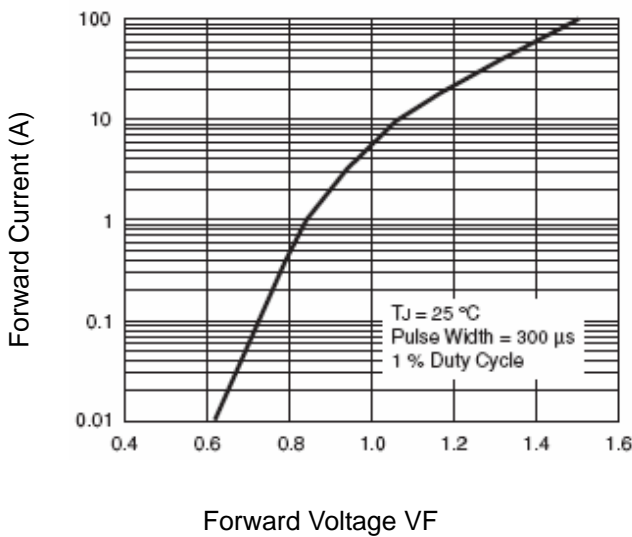


Fig. 3 Forward Voltage

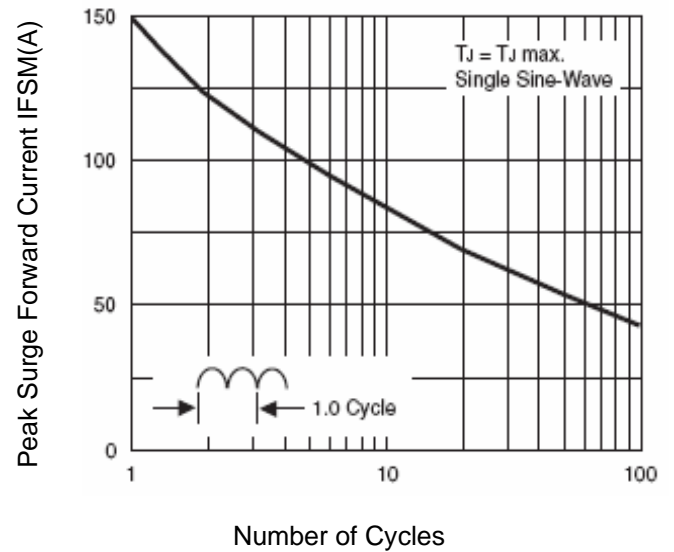


Fig. 4 Peak Surge Forward Capability