

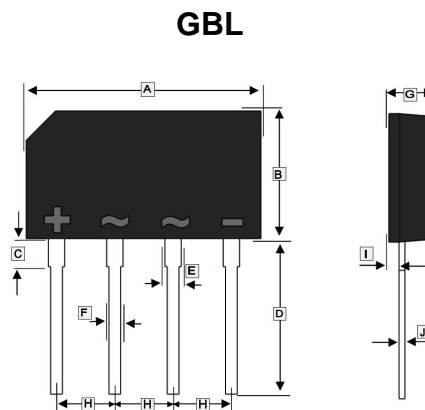
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- I_o : 4A
- V_{RRM} : 50~1000V
- Glass passivated chip
- High surge forward current capability

APPLICATIONS

- General purpose 1 phase Bridge rectifier applications



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	19.2	21.2	F	0.9	1.1
B	10.5	11.5	G	3.0	4.0
C	2.0	3.0	H	4.8	5.3
D	12.7	15.0	I	0.8	1.2
E	1.3	1.8	J	0.3	0.7

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		GBL 4005	GBL 401	GBL 402	GBL 404	GBL 406	GBL 408	GBL 410	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz sine wave, R-load, $T_A=25^\circ\text{C}$	With heatsink	4.0							A
	Without heatsink	2.5							
Surge (Nonrepetitive) Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	I_{FSM}	135							A
Current Squared Time ¹	I^2t	75							A ² S
Peak Forward Voltage @ $I_{FM}=2.0\text{A}$, Pulse measurement, Rating of per diode	V_{FM}	1.05							V
Peak Reverse Current @ $V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	I_{RRM}	10							μA
Thermal Resistance	With heatsink	28							$^\circ\text{C} / \text{W}$
	Without heatsink	47							
	With heatsink	10							
Junction and Storage temperature range	T_J, T_{STG}	-55~+150							$^\circ\text{C}$

Notes :

1. $1\text{ms} \leq t < 8.3\text{ms}$ $T_J=25^\circ\text{C}$, Rating of per diode

RATINGS AND CHARACTERISTIC CURVES

FIG1: I_o - T_a Curve

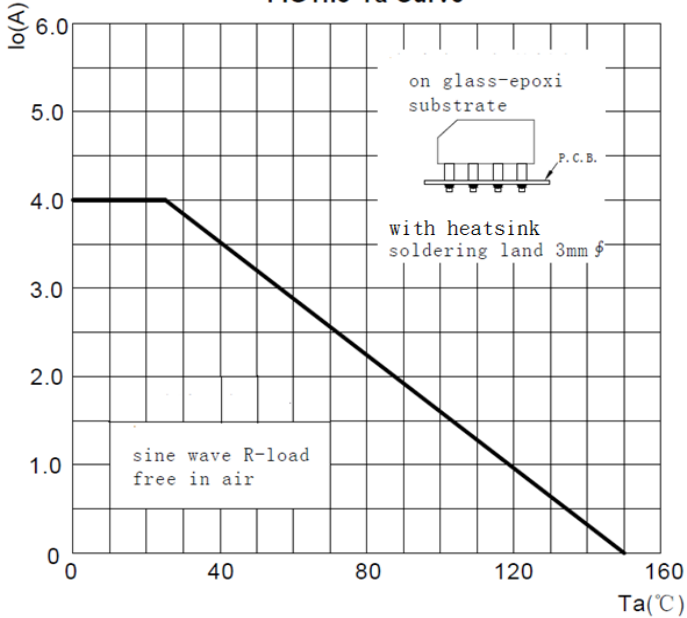


FIG2: Surge Forward Current Capacity

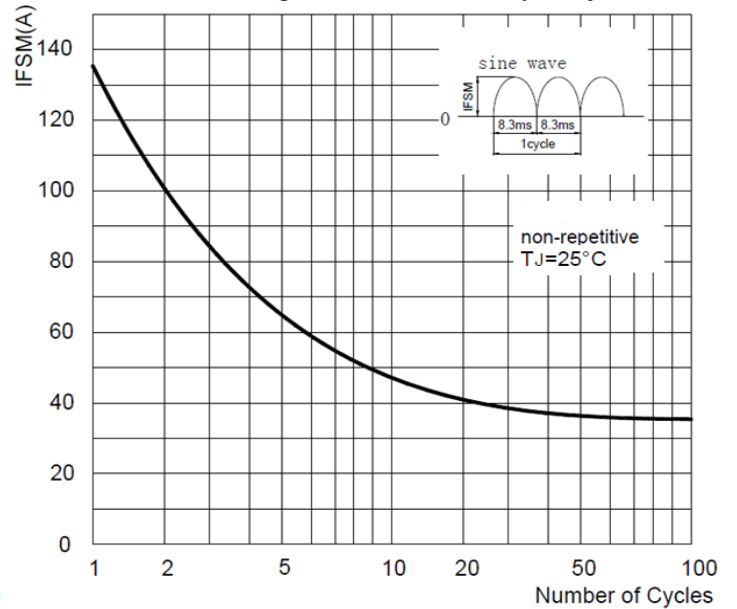


FIG3: Forward Voltage

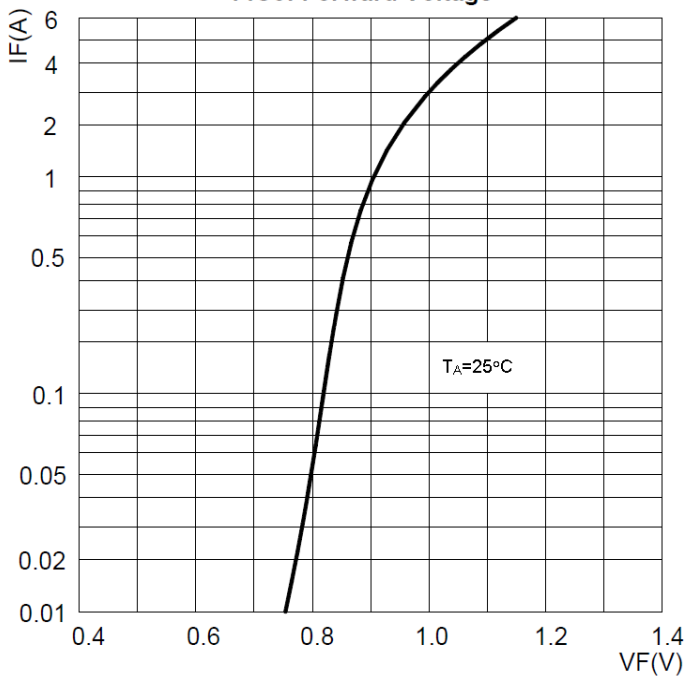


FIG4: Typical Reverse Characteristics

