

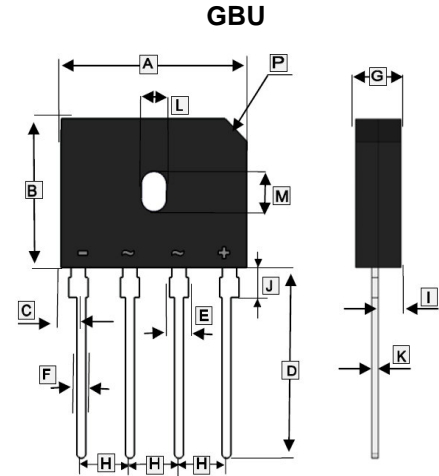
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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	21.7	22.3	H	4.8	5.33
B	18.2	19.1	I	1.8	2.66
C	3.4 REF.		J	1.8	2.54
D	17.27	18.5	K	0.4	0.6
E	1.8	2.54	L	3.5	4.1
F	0.9	1.3	M	5.7 TYP.	
G	3.3	3.8	P	3*45 TYP.	

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
		GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 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	With heatsink $T_C=108^\circ\text{C}$	4							A
	Without heatsink $T_C=108^\circ\text{C}$	2.3							
Surge (Nonrepetitive) Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	I_{FSM}	120							A
Current Squared Time ¹	I^2t	59							A ² S
Dielectric Strength @ Terminals to case , AC 1 minute	V_{DIS}	2							KV
Mounting Torque @ Recommend torque : 5kg.cm	Tor	8							Kg.cm
Peak Forward Voltage @ $I_{FM}=2\text{A}$, 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	Without heatsink	$R_{\theta JA}$							$^\circ\text{C} / \text{W}$
	Without heatsink	$R_{\theta JC}$							
	With heatsink	$R_{\theta JC}$							
Junction and Storage temperature range	T_J, T_{STG}	-55~+150							$^\circ\text{C}$

Note:

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_c Curve

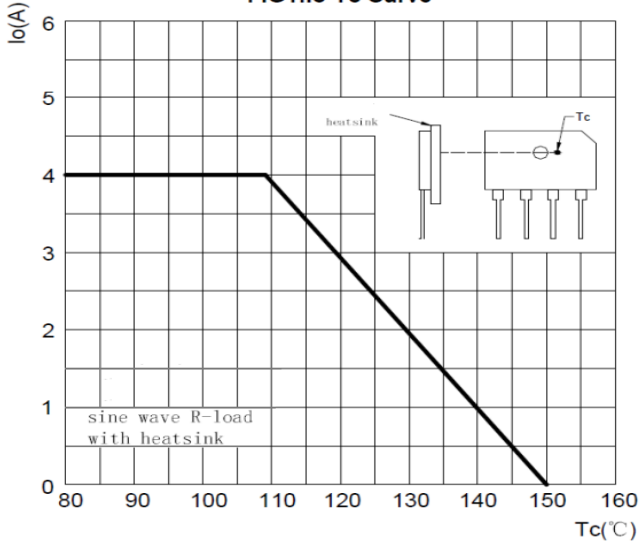


FIG 2 : I_o - T_c Curve

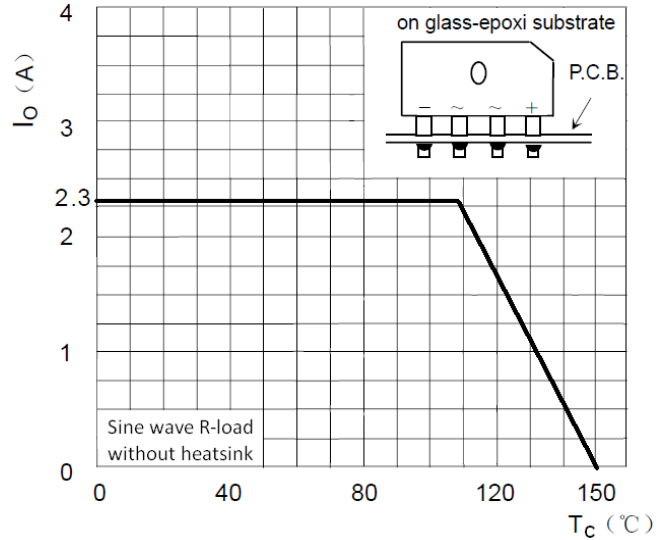


FIG 3: Surge Forward Current Capacity

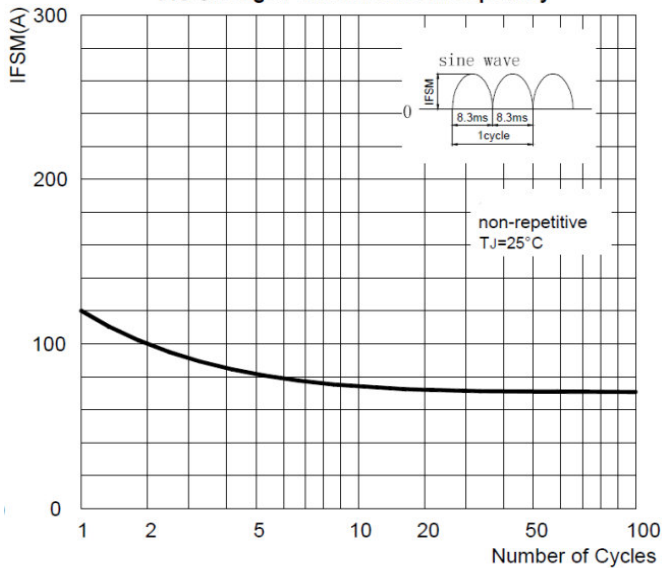


FIG4 : Forward Voltage

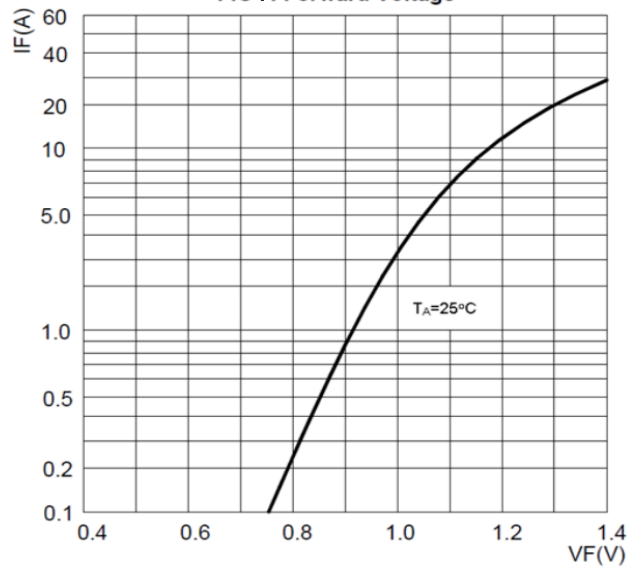


FIG5 : Typical Reverse Characteristics

