

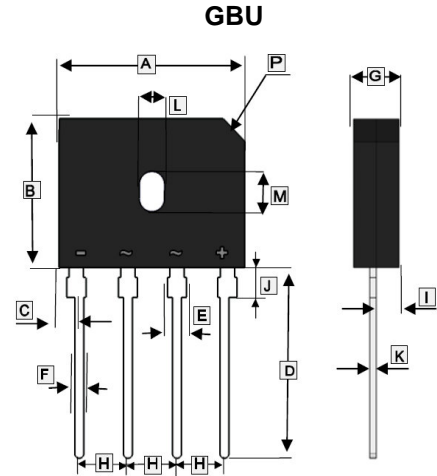
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**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 <sup>1</sup>	$I^2t$	59							A <sup>2</sup> 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							$\mu\text{A}$
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

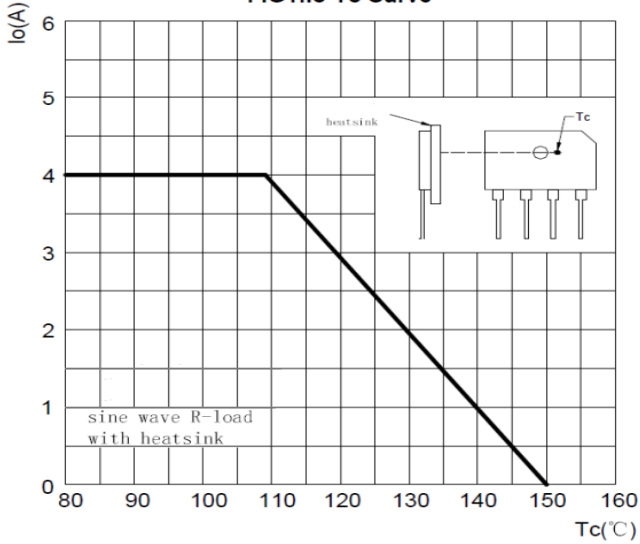


FIG 2 :  $I_o$ - $T_c$  Curve

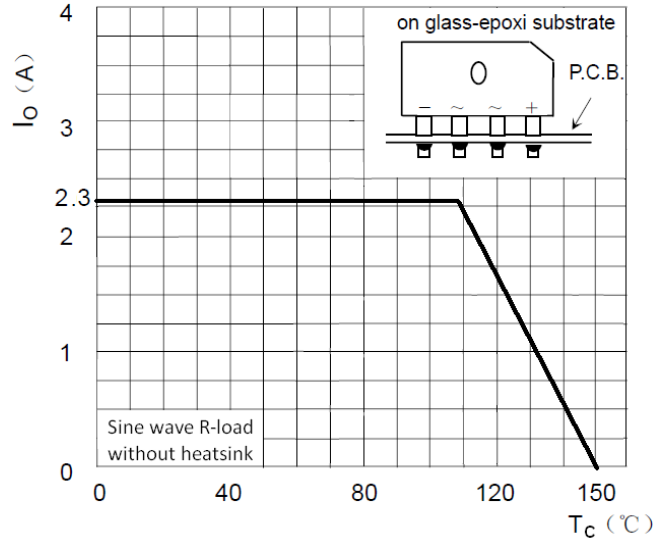


FIG 3: Surge Forward Current Capacity

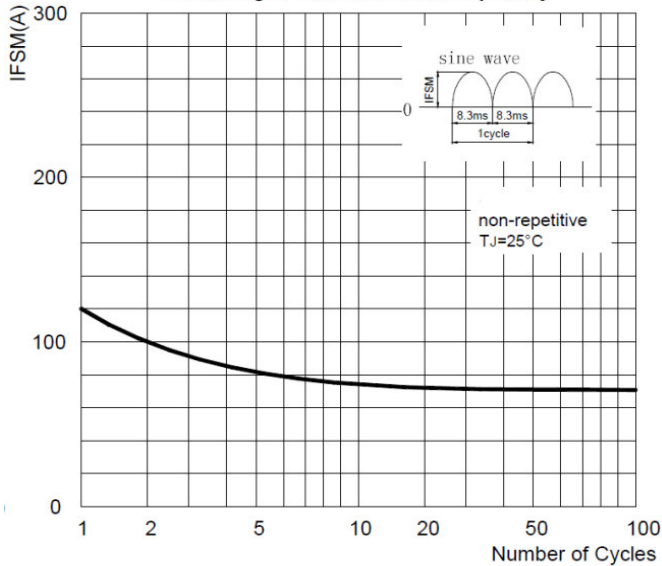


FIG4 : Forward Voltage

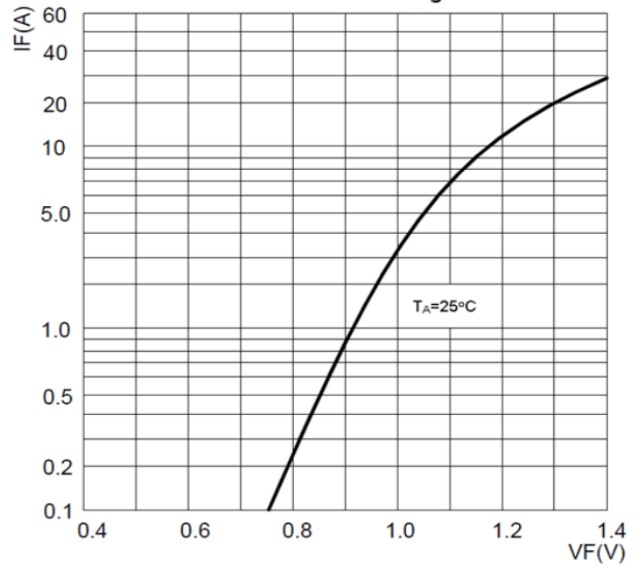


FIG5 : Typical Reverse Characteristics

