

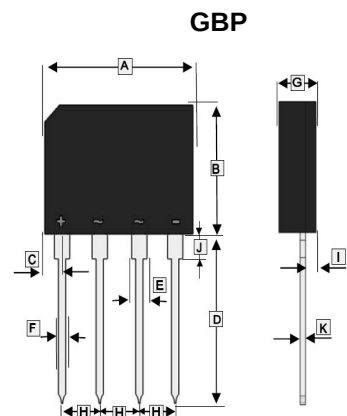
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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	14.25	14.75	G	3.35	3.65
B	10.1	10.6	H	3.7	3.9
C	1.23	1.83	I	0.8	1.1
D	14.25	14.73	J	1.8	2.2
E	1.22	1.42	K	0.35	0.55
F	0.76	0.86			

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
		GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 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	Without heatsink $T_C=70^{\circ}\text{C}$	4							A
	With heatsink $T_C=130^{\circ}\text{C}$								
Surge (Non-repetitive) Forward Current@ 60Hz sine wave, 1 cycle, $T_J=25^{\circ}\text{C}$	I_{FSM}	110							A
Current Squared Time ¹	I^2t	50							A ² S
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 from Junction to Ambient	$R_{\theta JA}$	47							$^{\circ}\text{C} / \text{W}$
Thermal Resistance from Junction to Case	$R_{\theta JC}$	10							$^{\circ}\text{C} / \text{W}$
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_c Curve

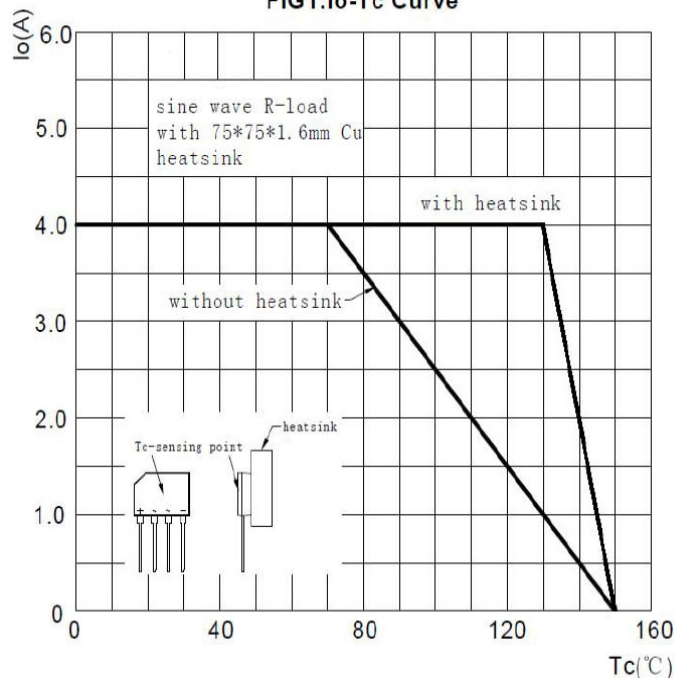


FIG2: Surge Forward Current Capability

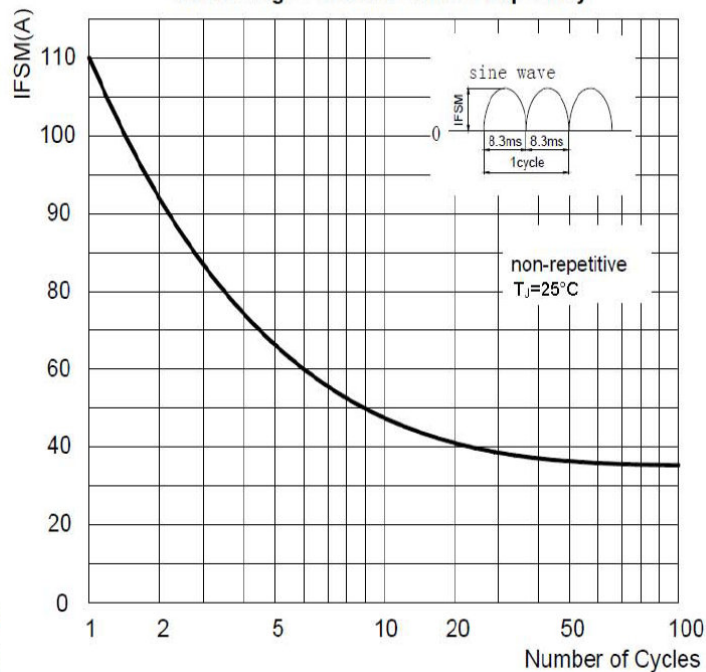


FIG3: Forward Voltage

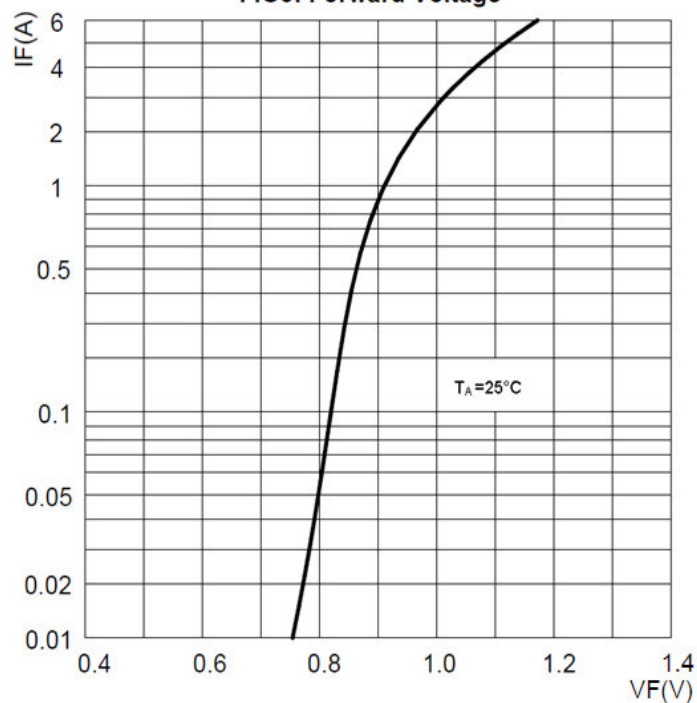


FIG4: Typical Reverse Characteristics

