

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

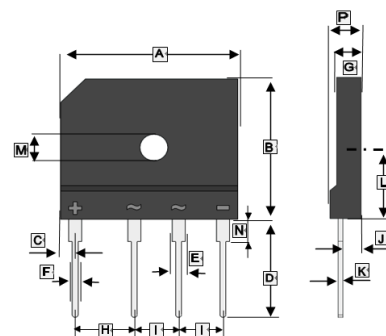
FEATURES

- I_o : 6A
- V_{RRM} : 50~1000V
- Glass passivated chip
- High surge forward current capability

APPLICATIONS

- General purpose 1 phase Bridge rectifier applications

6KBJ



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	29.7	30.3	I	7.3	7.7
B	19.7	20.3	J	2.5	3.9
C	2.3	2.7	K	0.6	0.8
D	17	18	L	10.8	11.2
E	2.0	2.4	M	ø 3.3 TYP.	
F	0.9	1.1	N	3.8	4.2
G	3.4	3.8	P	4.4	4.8
H	9.8	10.2			

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
		GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	
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 $T_C=110^\circ\text{C}$	6							A
	Without heatsink $T_A=25^\circ\text{C}$	2.8							
Surge (Nonrepetitive) Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	I_{FSM}	150							A
Current Squared Time ¹	I^2t	93							A ² S
Dielectric Strength @ Terminals to case , AC 1 minute	V_{DIS}	2.5							KV
Mounting Torque @ Recommend torque : 5kg.cm	Tor	8							Kg.cm
Peak Forward Voltage @ $I_{FM}=3\text{A}$, 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	26							$^\circ\text{C} / \text{W}$
	With heatsink	3.4							
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

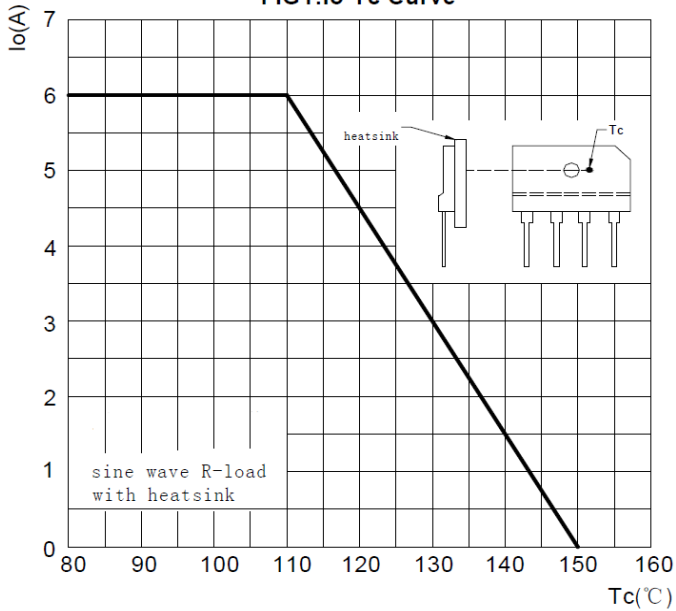


FIG2: Surge Forward Current Capability

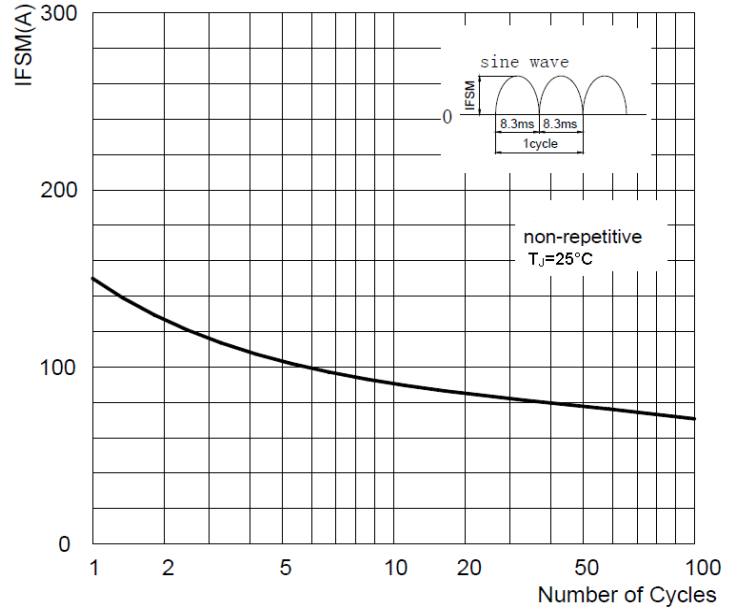


FIG3: Forward Voltage

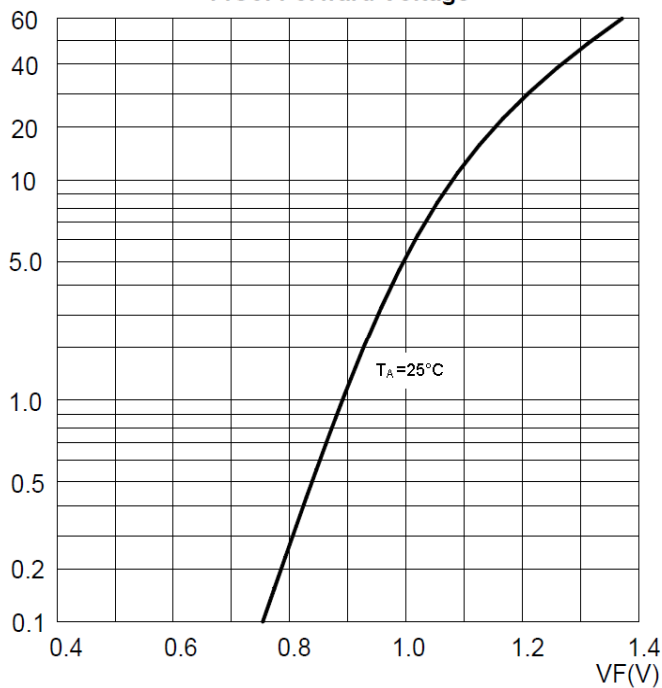


FIG4: Typical Reverse Characteristics

