

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

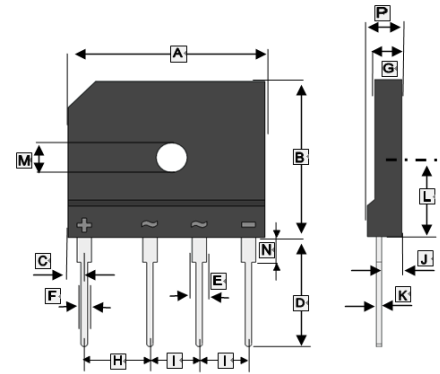
## FEATURES

- $I_o$  : 25A
- $V_{RRM}$  : 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%.)

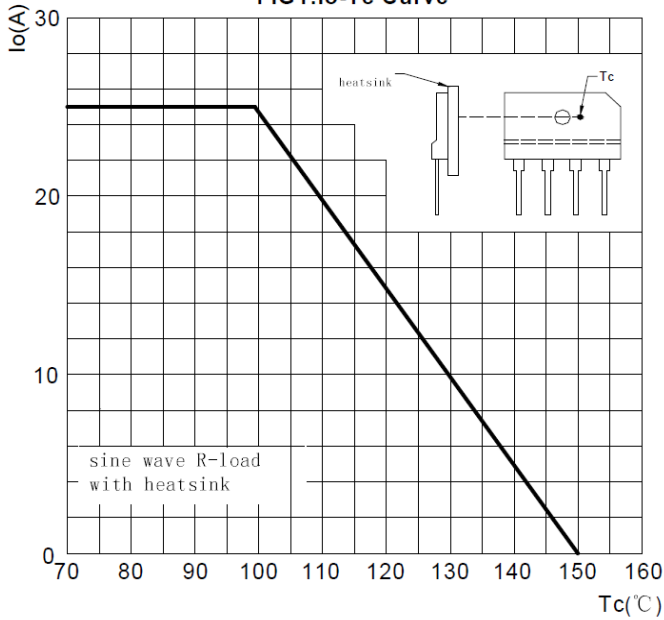
Parameter	Symbol	Part Number							Unit
		GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz sine wave, R-load	With heatsink $T_C=98^\circ\text{C}$	25							A
	Without heatsink $T_A=25^\circ\text{C}$	3.5							
Surge (Nonrepetitive) Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	$I_{FSM}$	260							A
Current Squared Time <sup>1</sup>	$I^2t$	280							A <sup>2</sup> 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@ $I_{FM}=12.5\text{A}$ , Pulse measurement, Rating of per diode	$V_{FM}$	1.1							V
Peak Reverse Current@ $V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	$I_{RRM}$	10							$\mu\text{A}$
Thermal Resistance	Without heatsink	22							$^\circ\text{C} / \text{W}$
	With heatsink	1.0							
Junction and Storage temperature range	$T_J, T_{STG}$	-55~+150							$^\circ\text{C}$

Notes :

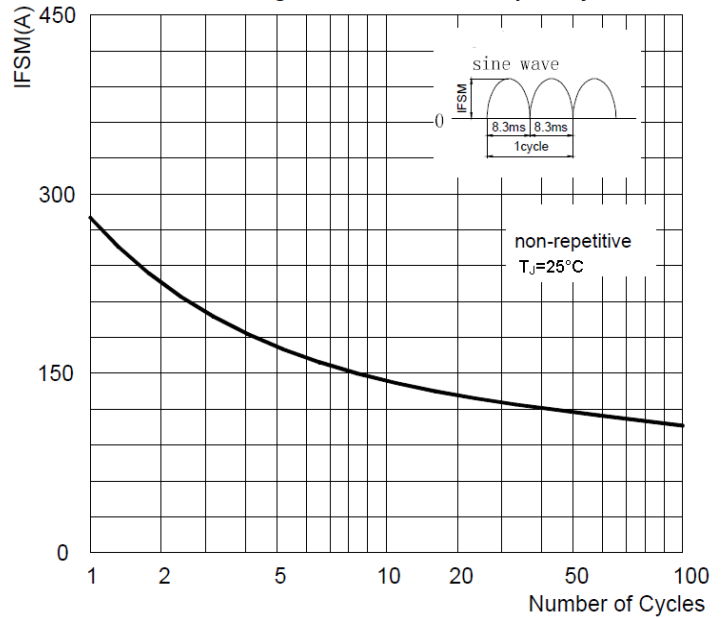
1.  $1\text{ms} \leq t < 8.3\text{ms}$   $T_J=25^\circ\text{C}$  , Rating of per diode

**RATINGS AND CHARACTERISTIC CURVES**

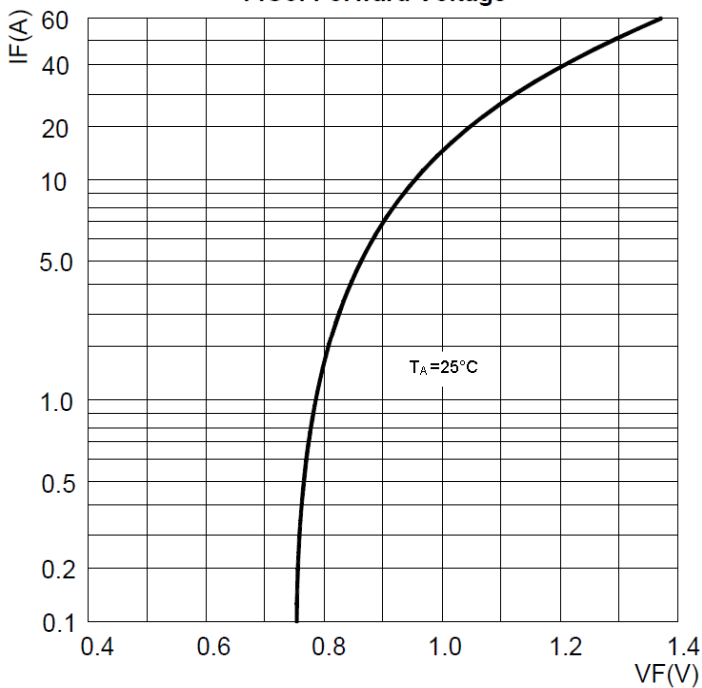
**FIG1:  $I_o$ - $T_c$  Curve**



**FIG2: Surge Forward Current Capacity**



**FIG3: Forward Voltage**



**FIG4: Typical Reverse Characteristics**

