



JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

6GBJ Plastic-Encapsulate Bridge Rectifier

GBJ8005 THRU GBJ810

General Purpose Bridge Rectifier

Features

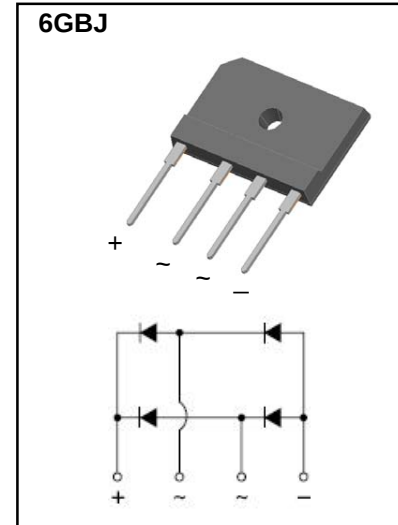
- I_O 8A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBJ8XX
XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		GBJ8						
					005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V _{RRM}	V			50	100	200	400	600	800	1000
Average Rectified Output Current	I _O	A	60Hz sine wave, R-load	With heatsink T _c =100℃	8.0						
				Without heatsink T _a =25℃	3.4						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60H _Z sine wave, 1 cycle, T _j =25℃		200						
Current Squared Time	I ² t	A ² S	1ms≤t<8.3ms T _j =25℃， Rating of per diode		166						
Storage Temperature	T _{stg}	℃			-55 ~+150						
Junction Temperature	T _j	℃			-55 ~+150						
Dielectric Strength	V _{dis}	KV	Terminals to case, AC 1 minute		2.5						
Mounting Torque	Tor	kg • cm	Recommend torque: 5kg • cm		8						

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 4.0\text{A}$, Pulse measurement, Rating of per diode	1.0
Peak Reverse Current	I_{RRM}	μA	$V_{RM} = V_{RRM}$, Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient, Without heatsink	9
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.8

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

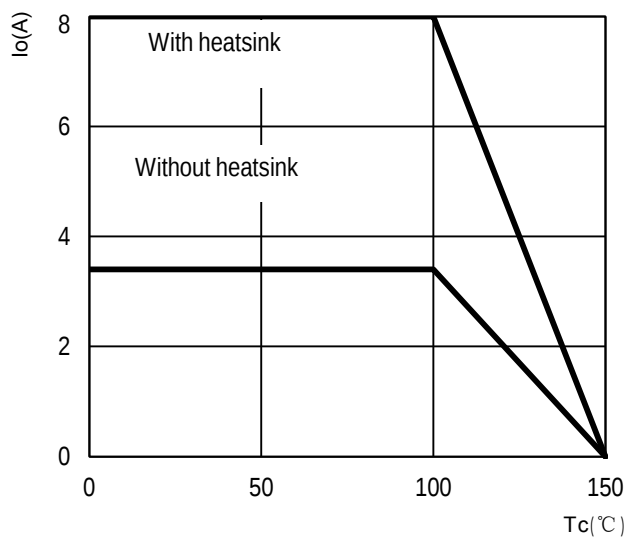


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

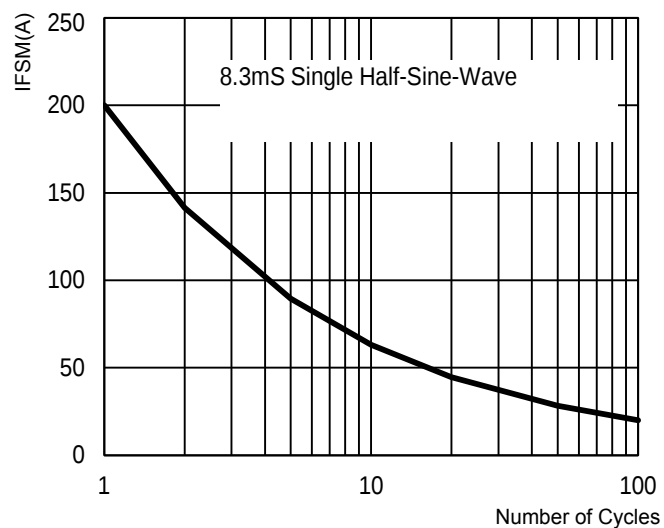


FIG.3-TYPICAL FORWARD CHARACTERISTICS

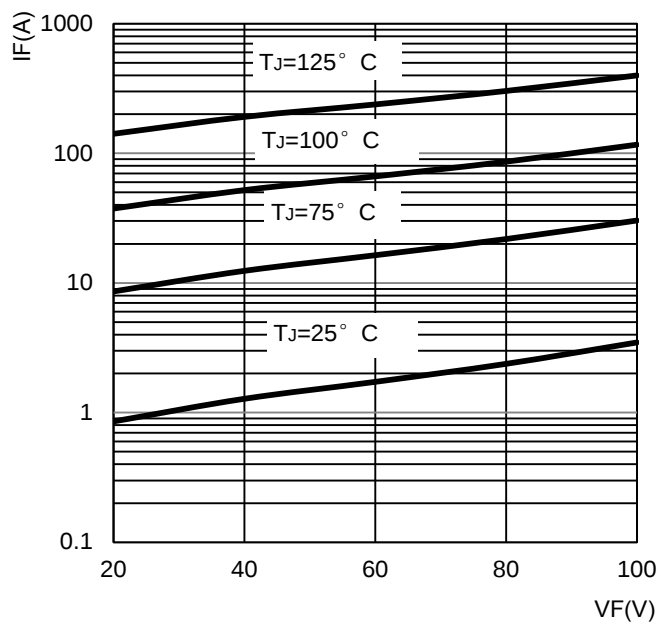


FIG.4-TYPICAL REVERSE CHARACTERISTICS

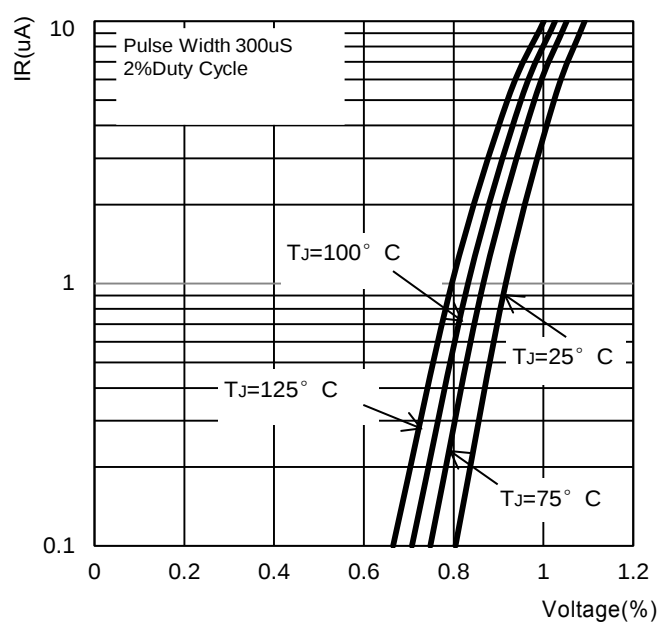
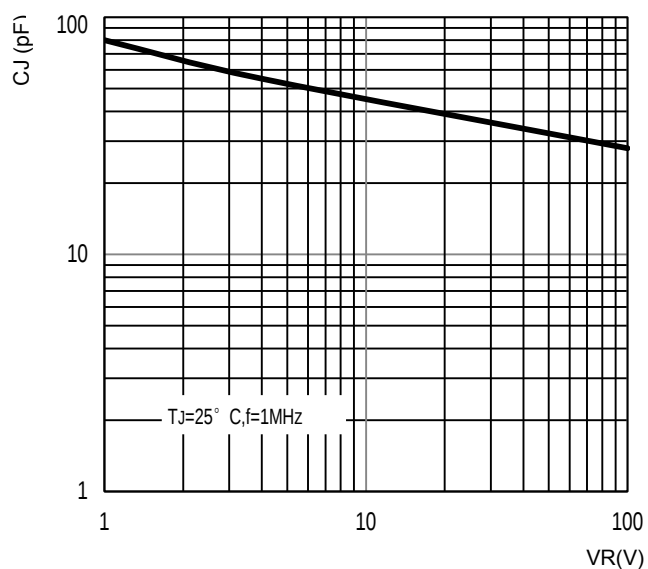
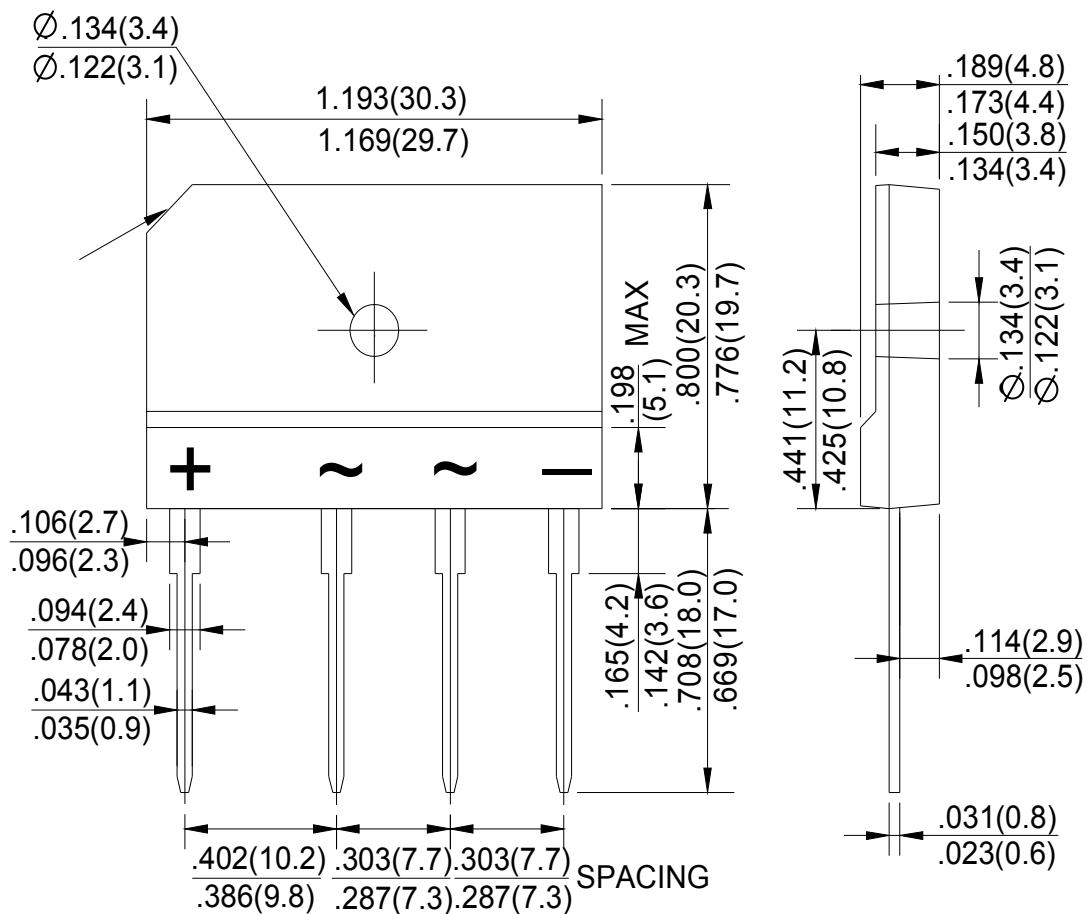


FIG.5-TYPICAL JUNCTION CAPACITANCE





Dimensions in inches and (millimeters)

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.