SZCJ Shenzhen Changji Semiconductor Co., LTD.

GBJ Plastic-Encapsulate Bridge Rectifier

GBJ6005 THRU GBJ610

General Purpose Bridge Rectifier

Features

- I_O 6A
- VRRM 50V-1000V
- High surge current capability
- Glass passivated chip

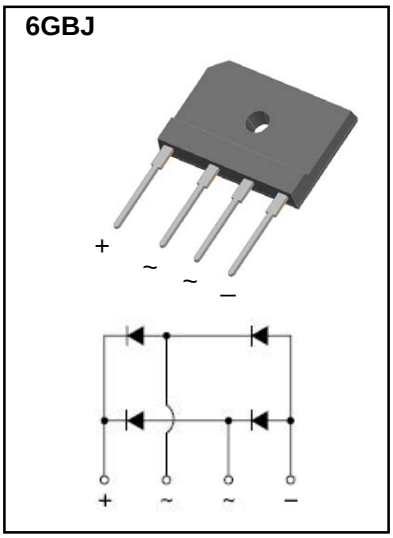
Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBJ6XX

XX：From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		GBJ6						
					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℃	6.0						
				Without heatsink T_c =100℃	3.3						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60H_Z half-sine wave, 1 cycle, T_j=25℃		175						
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃，Rating of per diode		127						
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℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=3.0A, 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	$R_{\theta J-A}$	℃/W	Between junction and ambient, Without heatsink	22
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.5

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

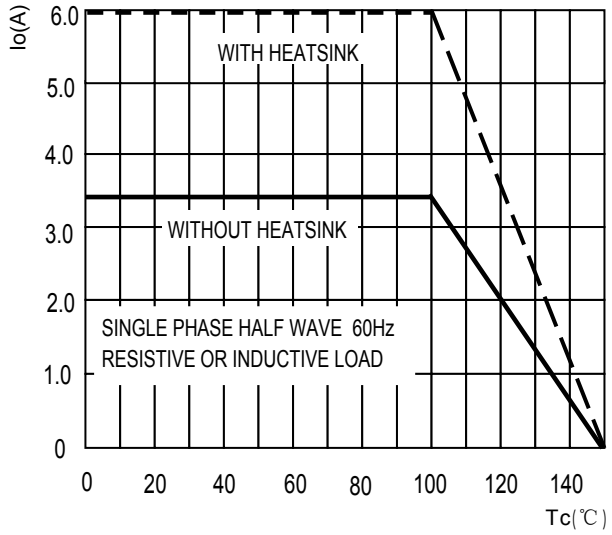


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

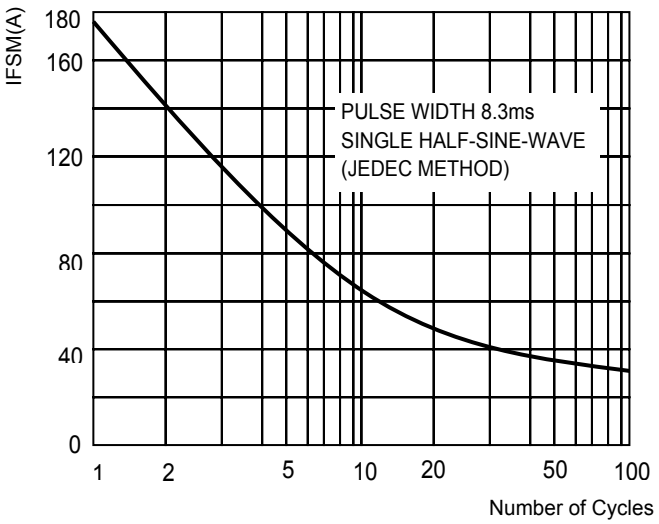


FIG.3-TYPICAL JUNCTION CAPACITANCE

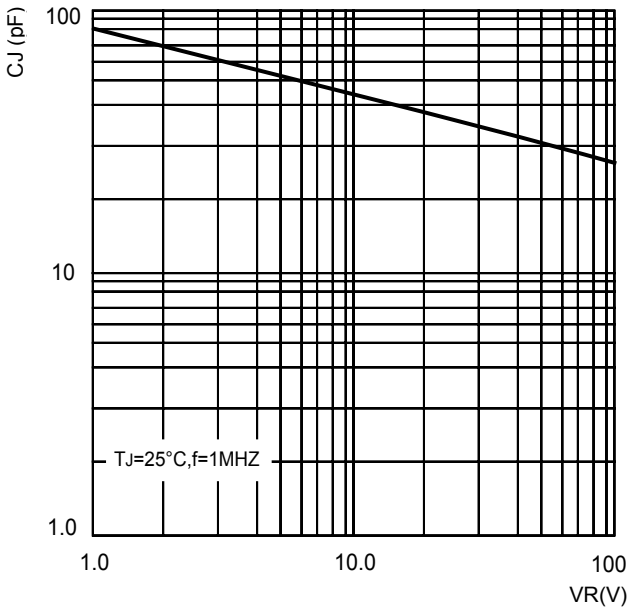


FIG.4-TYPICAL FORWARD CHARACTERISTICS

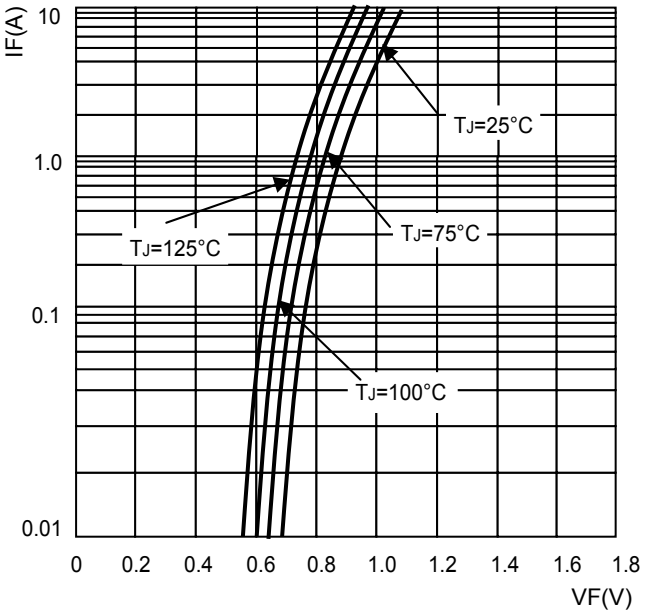
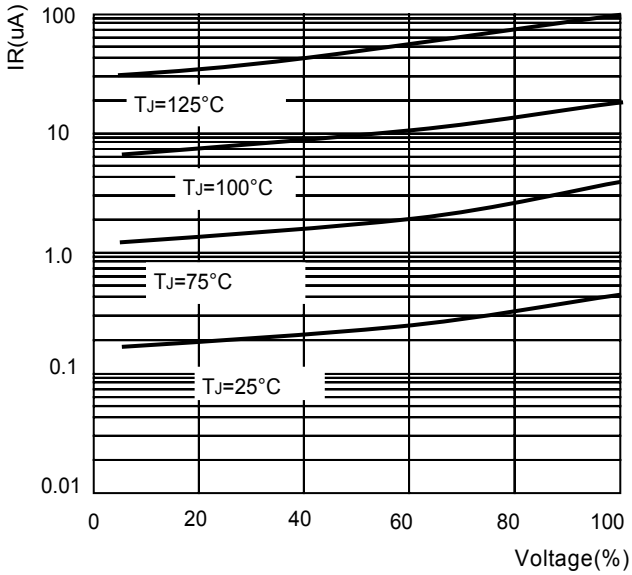
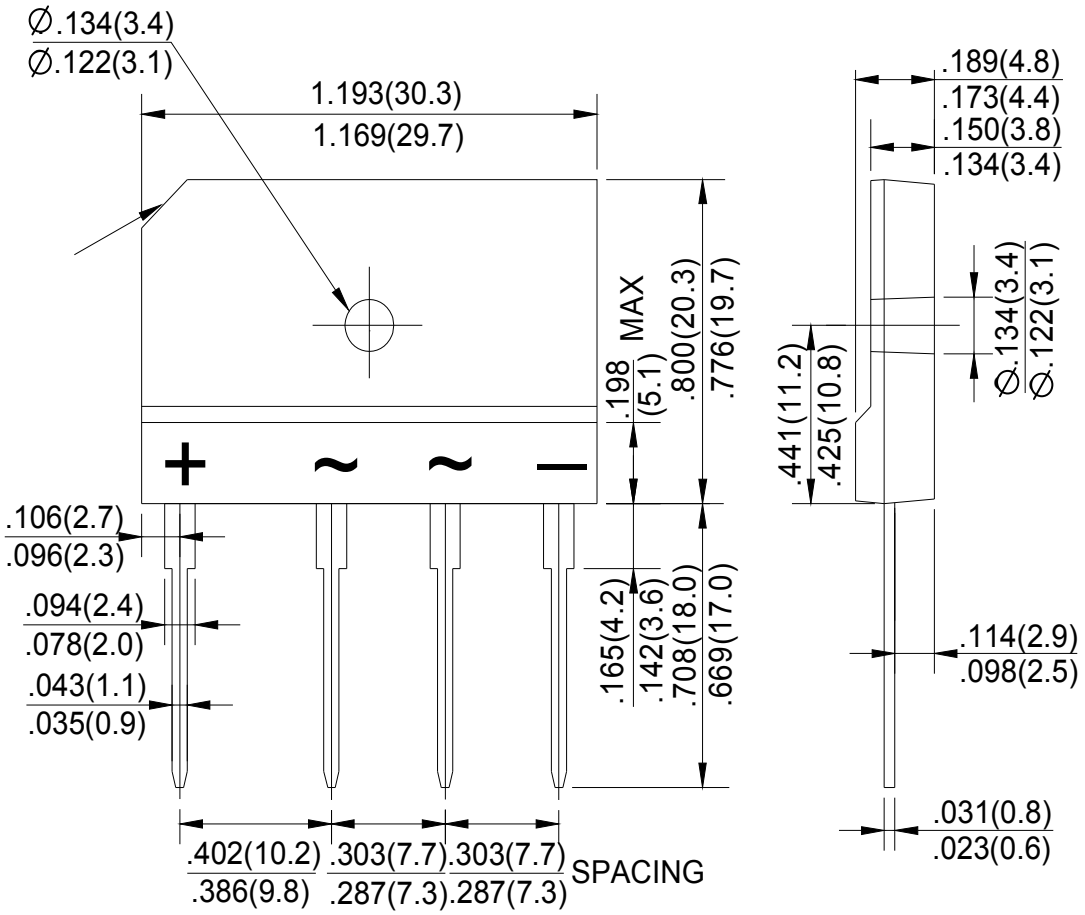


FIG.5-TYPICAL REVERSE CHARACTERISTICS



6GBJ Package Outline Dimensions



Dimensions in inches and (milimeters)

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