SZCJ Shenzhen Changji Semiconductor Co., LTD.

GBP Plastic-Encapsulate Bridge Rectifier

GBP3005 THRU GBP310 General Purpose Bridge Rectifier

Features

- I_O 3A
- VRRM 50V-1000V
- High surge current capability
- Glass passivated chip

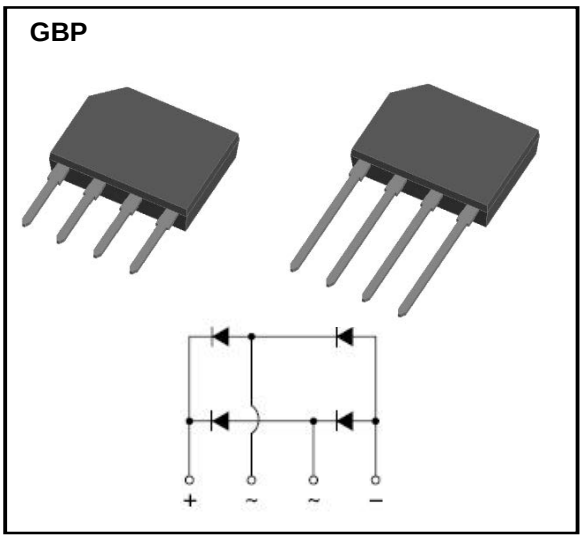
Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBP3XX

XX：From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBP3						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load ,Tc=100℃	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz half-sine wave, 1 cycle, T_j=25℃	75						
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃， Rating of per diode	23.3						
Storage Temperature	T_{stg}	℃		-55 ~+150						
Junction Temperature	T_j	℃		-55 ~+150						

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	1.1
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient	47
	$R_{\theta J-C}$		Between junction and case	10

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

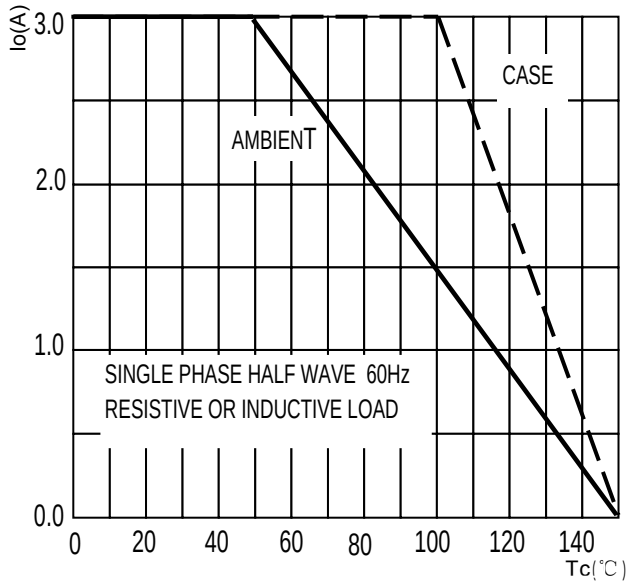


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

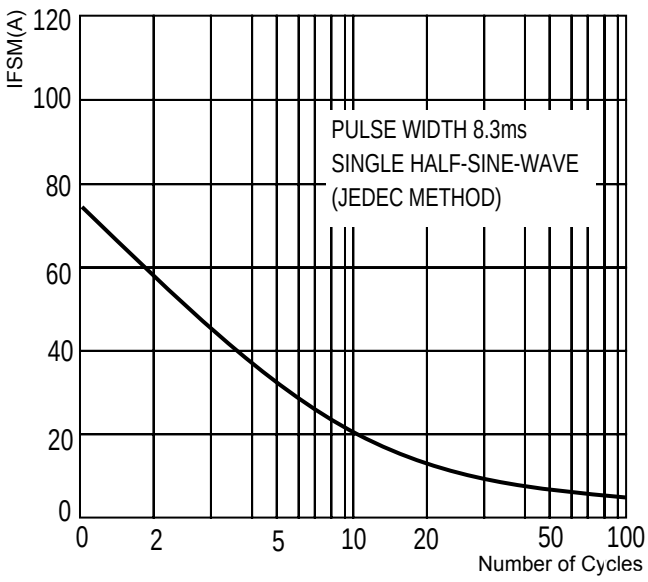


FIG.3-TYPICAL FORWARD CHARACTERISTICS

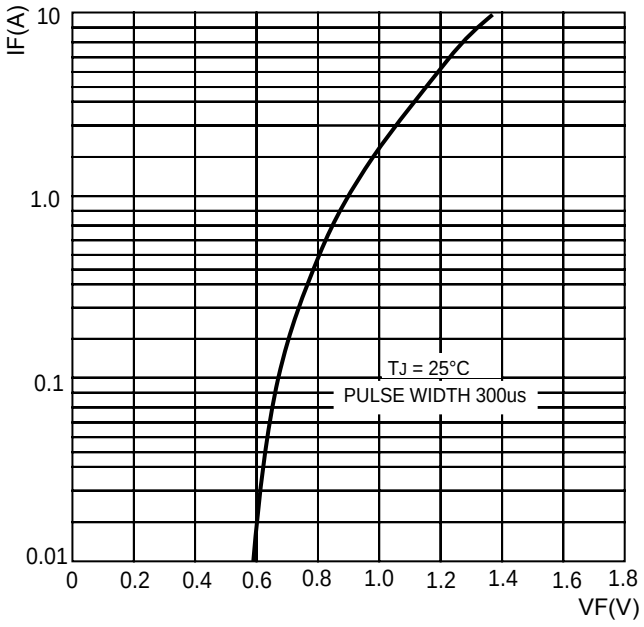
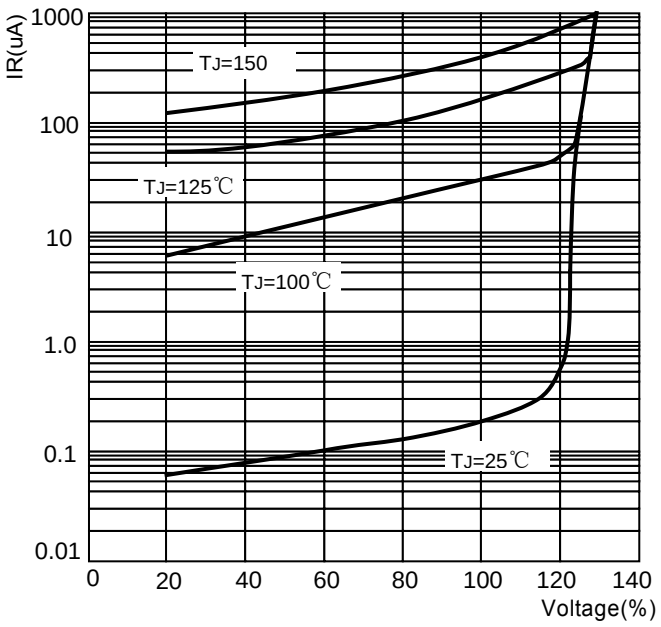
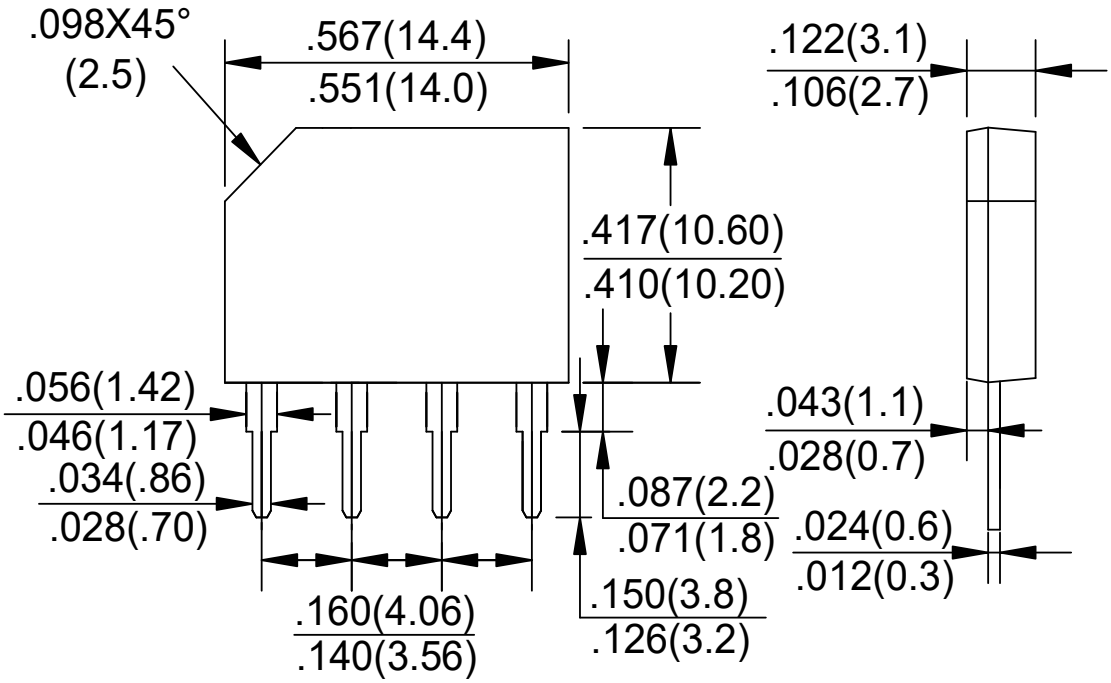
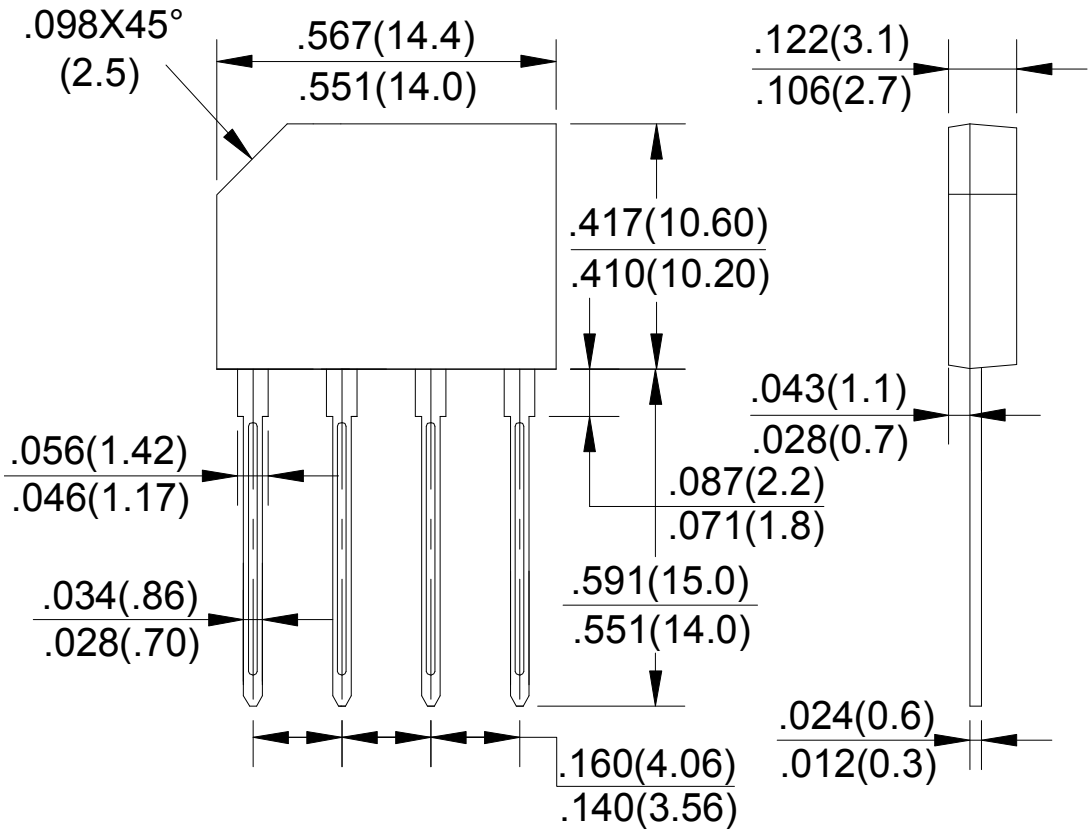


FIG.4-TYPICAL REVERSE CHARACTERISTICS



GBP Package Outline Dimensions





Dimensions in inches and (milimeters)

NOTICE

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