SZCJ Shenzhen Changji Semiconductor Co., LTD.

JBF Plastic-Encapsulate Bridge Rectifier

RJBF310 Fast Recovery Bridge Rectifier

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 1000V
- High surge current capability
- Glass passivated chip

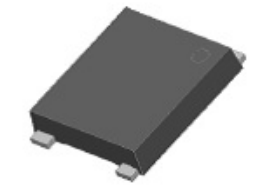
Applications

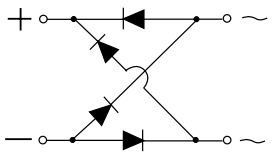
- General purpose 1 phase Bridge rectifier applications

Marking

- RJBF310

JBF





Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		RJBF310
Repetitive Peak Reverse Voltage	V_{RRM}	V			1000
Maximum RMS Voltage	V_{RMS}	V			700
Maximum DC Blocking Voltage	V_{DC}	V			1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load,TL=110℃	On alumina substrate	3.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	8.3ms sine wave, 1 cycle, T_j=25℃		95
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃， Rating of per diode		37.5
Operation Junction and Storage Temperature Range	T_J,T_{stg}	℃			-55 ~+150

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	RJBF310
Maximum Peak Forward Voltage	V_{FM}	V	I_{FM}=3.0A, Pulse measurement, Rating of per diode	1.3
Maximum Peak Reverse Current	I_{RRM}	μA	V_{RM}=V_{RRM} , TJ=25℃	5
			V_{RM}=V_{RRM} , TJ=125℃	500
Maximum Peak Reverse Current	trr	ns	I_F=0.5A,I_R=1.0A,Irr=0.25A	500
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	35
Typical thermal resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient, On alumina substrate	55
	$R_{\theta J-C}$		Between junction and case	10
	$R_{\theta J-L}$		Between junction and lead	15

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

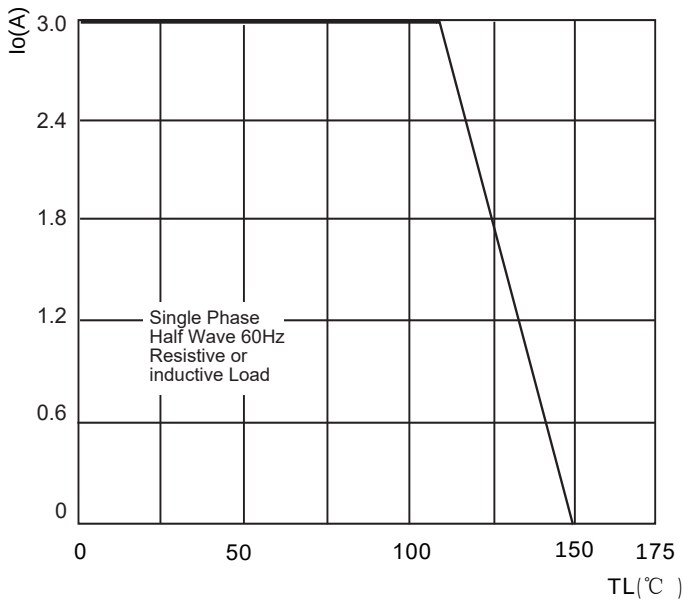


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

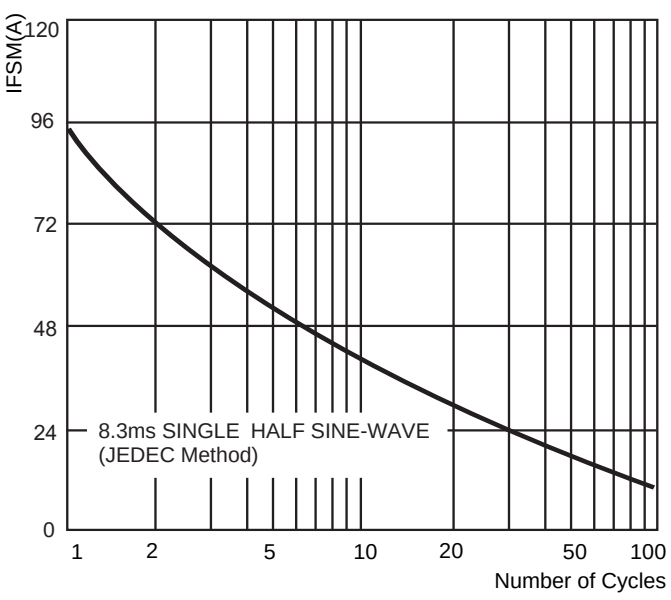


FIG.3: TYPICAL FORWARD CHARACTERISTICS

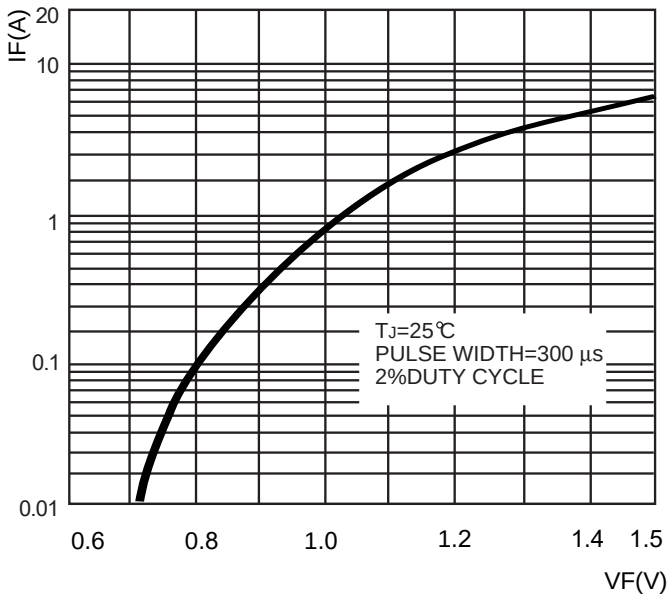
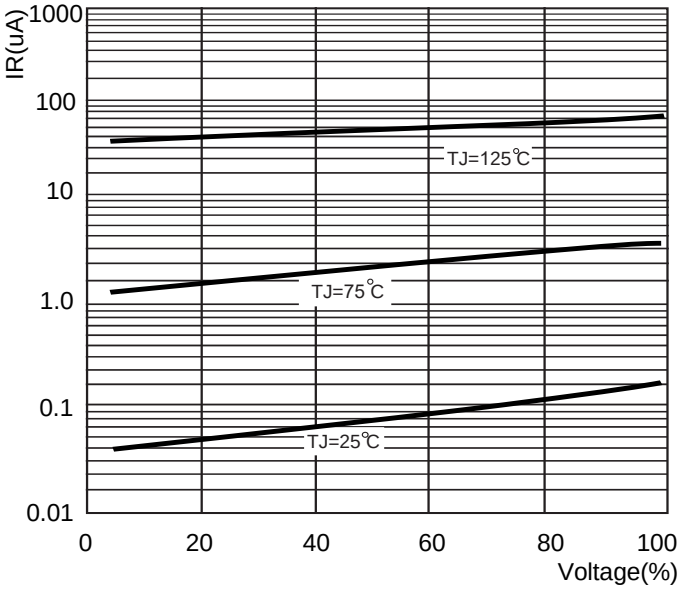
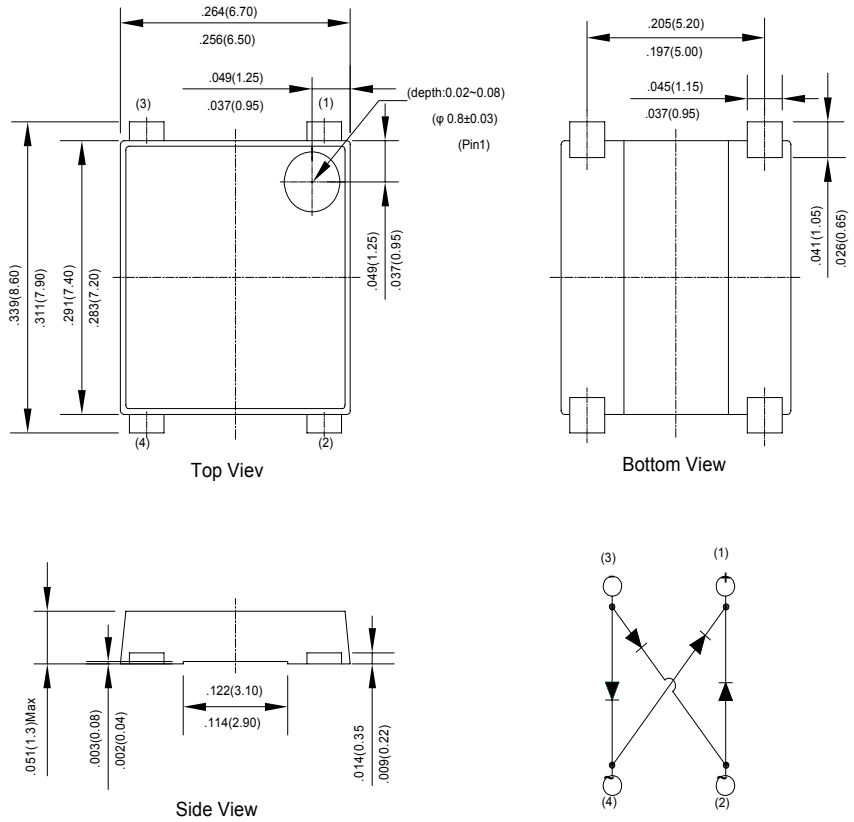


FIG.4:TYPICAL REVERSE CHARACTERISTICS

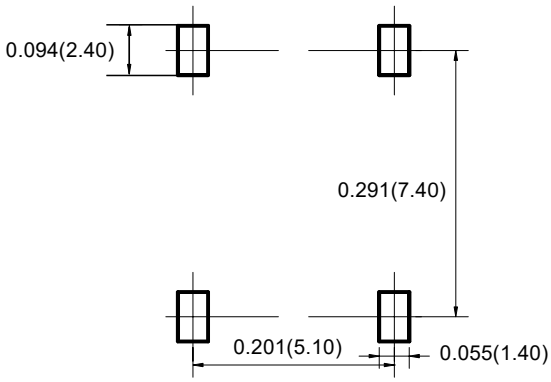


JBF Package Outline Dimensions



Dimensions in inches and (millimeters)

JBF Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

NOTICE

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