



## JBF Plastic-Encapsulate Bridge Rectifier

### RJBF310 Fast Recovery Bridge Rectifier

#### Features

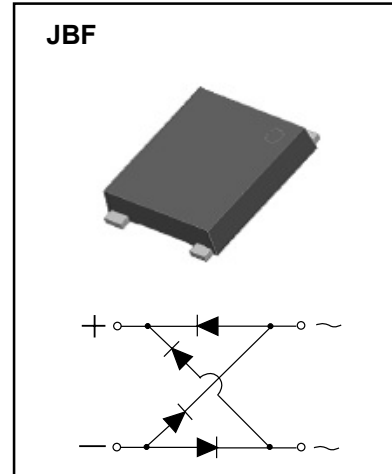
- $I_{F(AV)}$  3A
- $V_{RRM}$  1000V
- High surge current capability
- Glass passivated chip

#### Applications

- General purpose 1 phase Bridge rectifier applications

#### Marking

- RJBF310



#### 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, $T_L=110^{\circ}C$ On alumina substrate	3.0
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	8.3ms sine wave, 1 cycle, $T_J=25^{\circ}C$	95
Current Squared Time	$I^2t$	$A^2S$	$1ms \leq t < 8.3ms$ $T_J=25^{\circ}C$ , Rating of per diode	37.5
Operation Junction and Storage Temperature Range	$T_J, T_{stg}$	$^{\circ}C$		-55 ~+150

#### Electrical Characteristics ( $T=25^{\circ}C$ 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	$I_{RRM}$	$\mu A$	$V_{RM}=V_{RRM}$ , $T_J=25^{\circ}C$	5
			$V_{RM}=V_{RRM}$ , $T_J=125^{\circ}C$	500
Maximum Peak Reverse Current	trr	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	500
Typical junction capacitance	$C_J$	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	35
Typical thermal resistance	$R_{\theta J-A}$	$^{\circ}C/W$	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

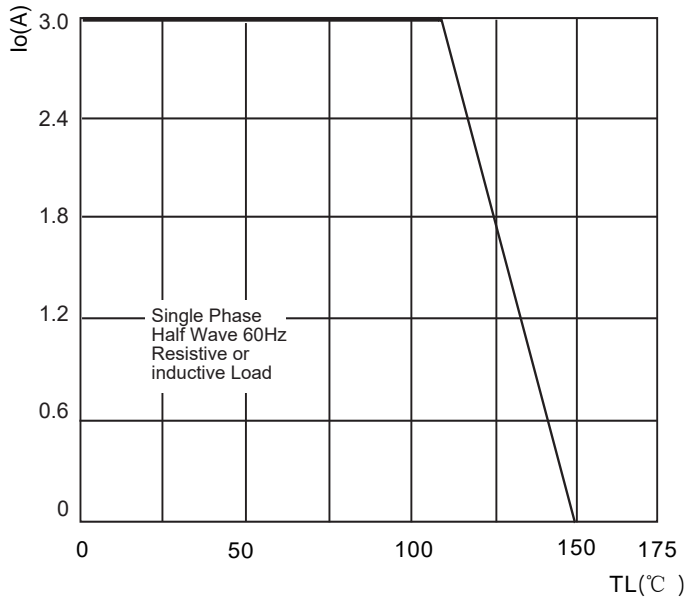


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

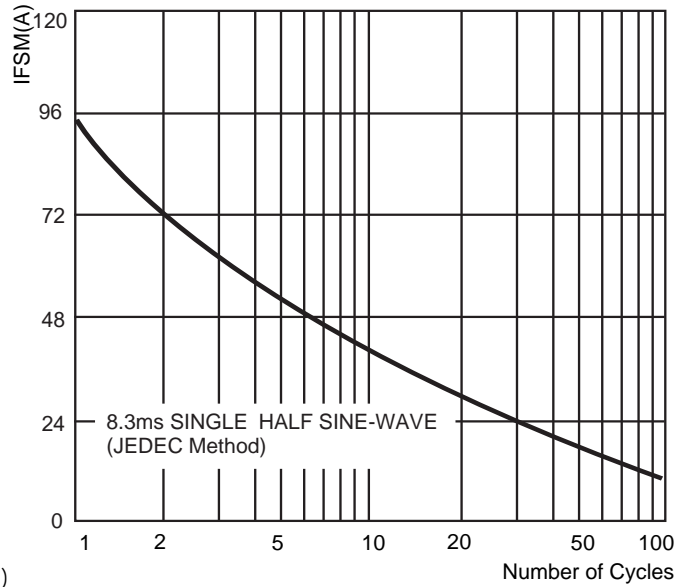


FIG.3: TYPICAL FORWARD CHARACTERISTICS

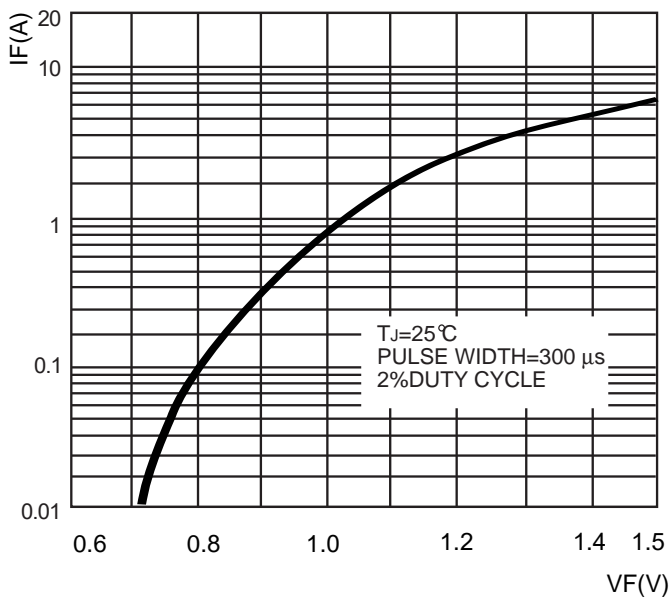
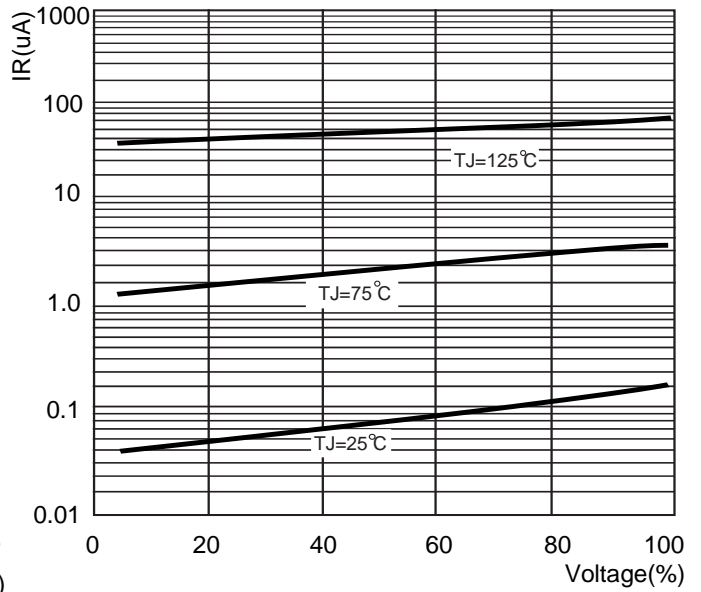
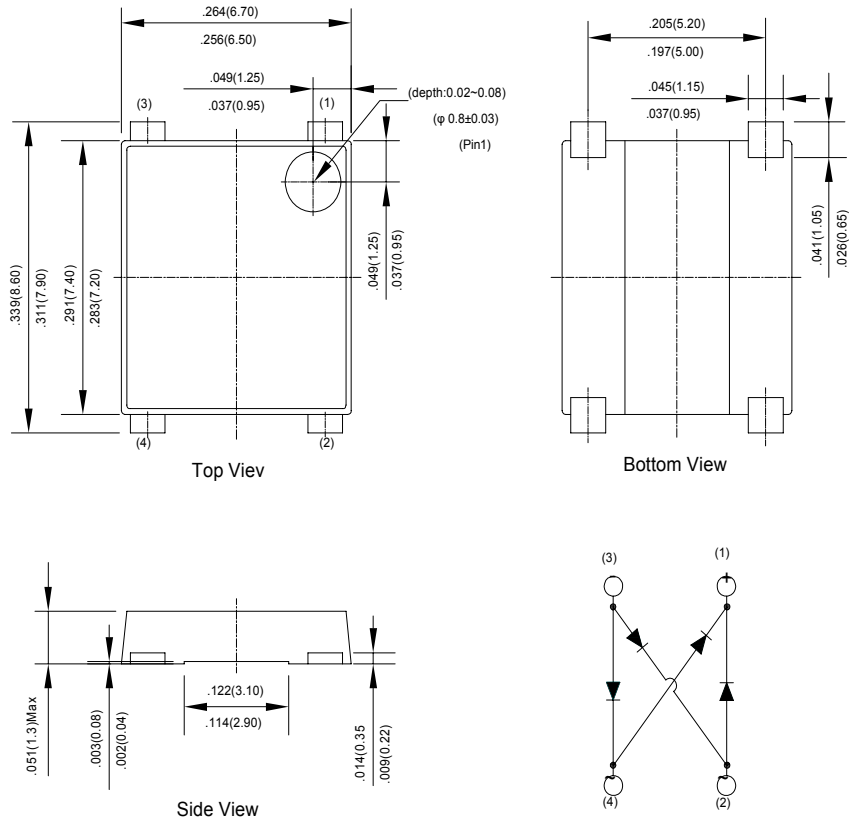


FIG.4: TYPICAL REVERSE CHARACTERISTICS

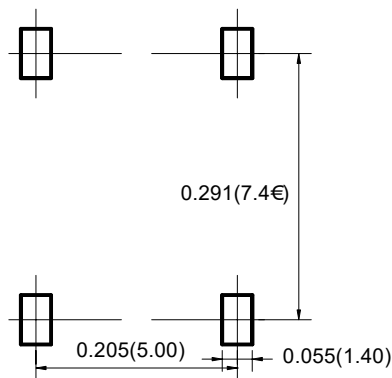


# JBF Package Outline Dimensions



Dimensions in inches and (millimeters)

# JBF Suggested Pad Layout



**Note:**

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

**NOTICE**

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