



JBF Plastic-Encapsulate Bridge Rectifier

JBF310 General Purpose Bridge Rectifier

Features

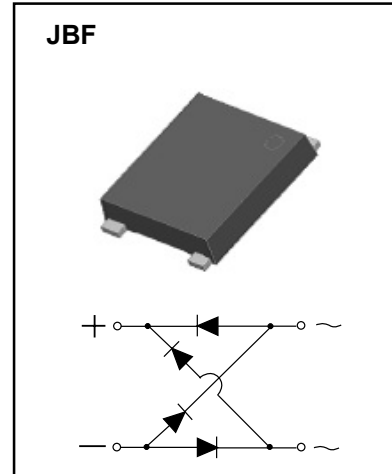
- $I_{F(AV)}$ 3A
- V_{RRM} 1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- JBF310



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	JBF310
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, $T_J=25^{\circ}C$	90
Current Squared Time	I^2t	A^2S	$1ms \leq t < 8.3ms$ $T_J=25^{\circ}C$, Rating of per diode	33.6
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	JBF310
Maximum Peak Forward Voltage	V_{FM}	V	$I_{FM}=3.0A$, Pulse measurement, Rating of per diode	1.0
Maximum Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, $T_J=25^{\circ}C$	5
			$V_{RM}=V_{RRM}$, $T_J=125^{\circ}C$	500
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	35
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

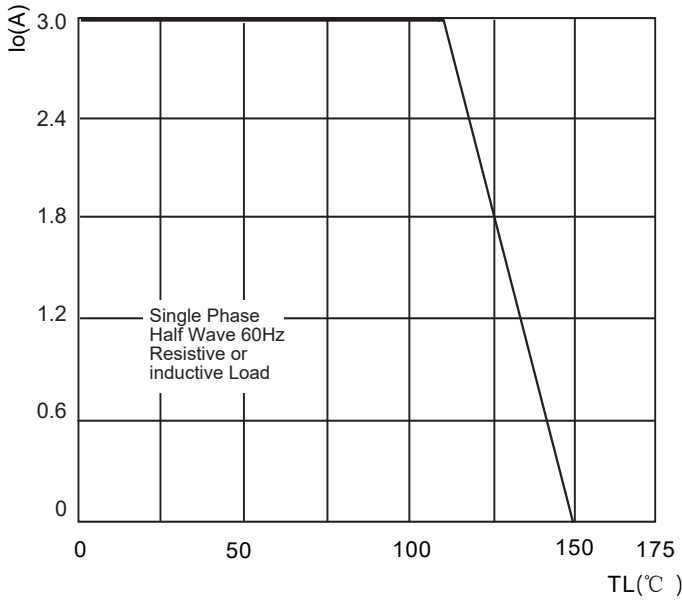


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

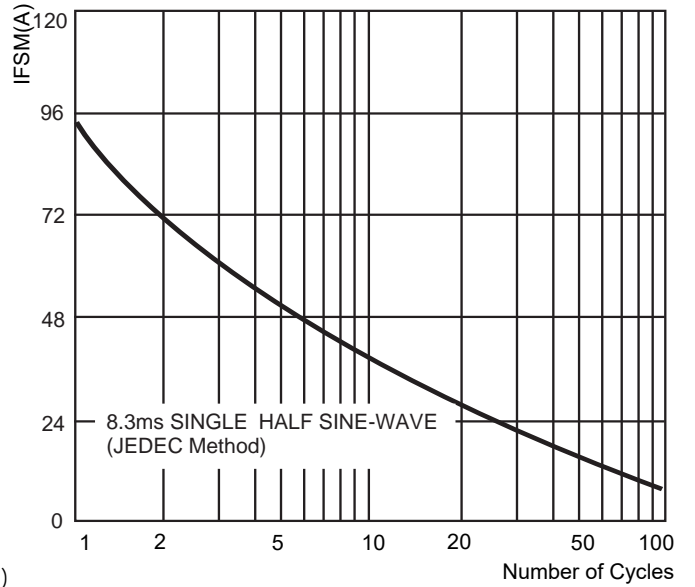


FIG.3: TYPICAL FORWARD CHARACTERISTICS

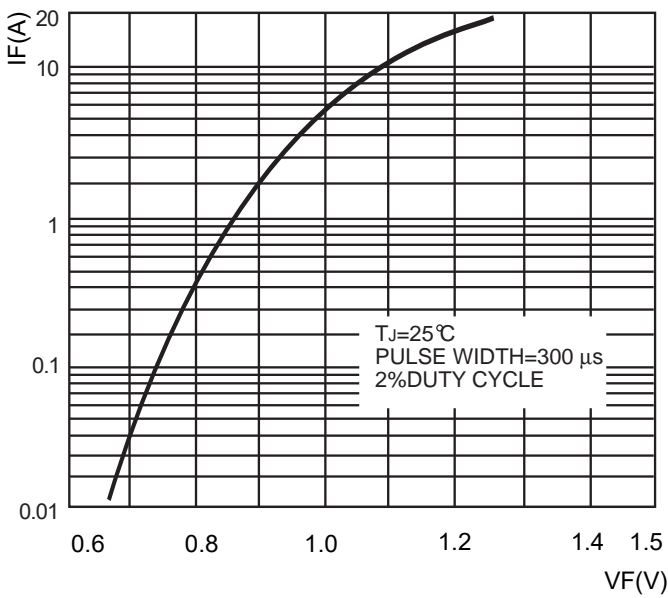
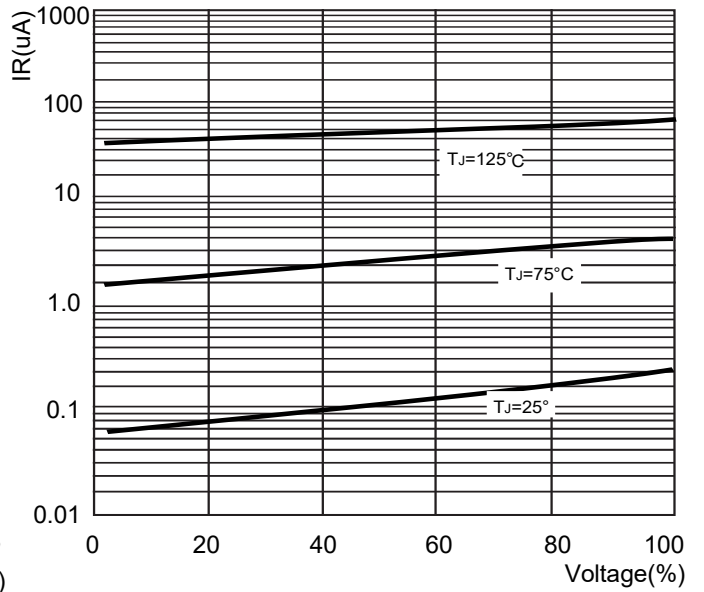
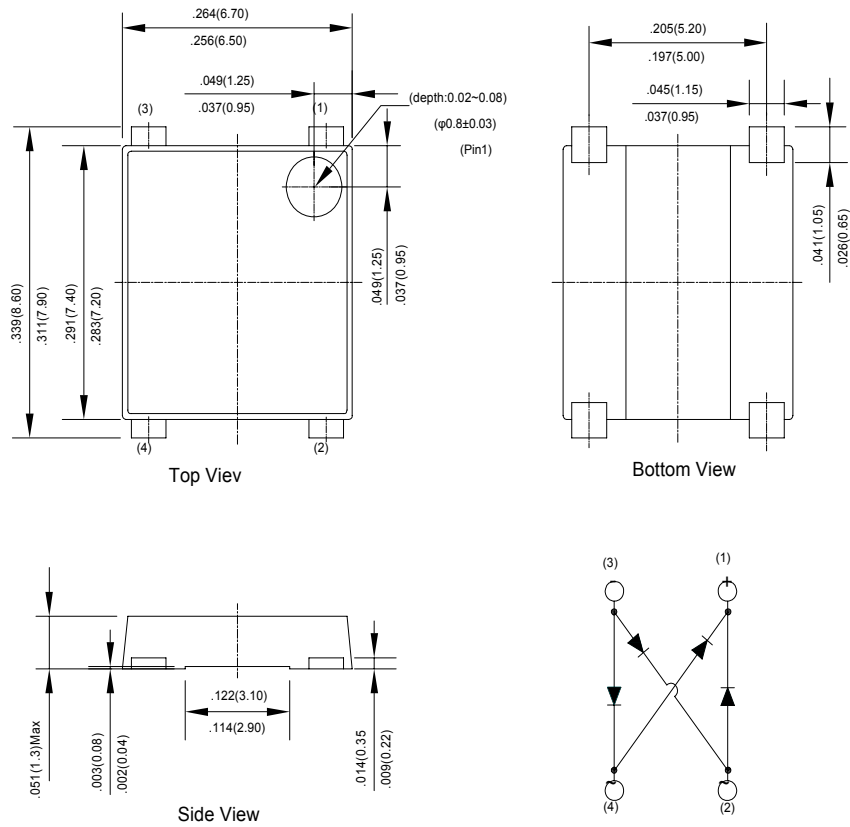


FIG.4: TYPICAL REVERSE CHARACTERISTICS

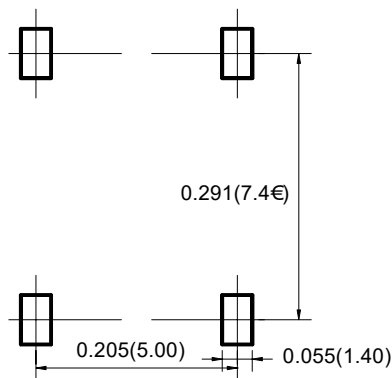


JBF Package Outline Dimensions



Dimensions in inches and (millimeters)

JBF Suggested Pad Layout



Note:

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

NOTICE

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