



# RDBF31A THRU RDBF310A

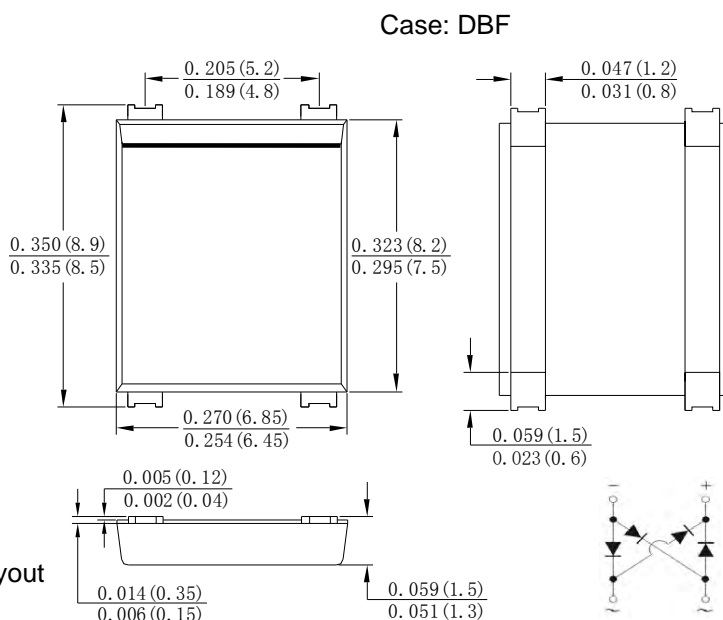
Single Phase 3.0 AMP Fast Glass Passivated Bridge Rectifier

## Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-100A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0

## Mechanical Data

- Case: DBF, molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Reference Mounting PAD Layout
- Marking: Type Number



dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	RDBF31A	RDBF32A	RDBF34A	RDBF36A	RDBF38A	RDBF310A	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$							
RMS Reverse Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_c=100^\circ\text{C}$	IF(AV)	3.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	90						A
$I^2t$ Rating for Fusing (t < 8.3ms)	$I^2t$	41.5						A <sup>2</sup> s
Forward Voltage per element @IF=3.0A	$V_{FM}$	1.3						V
Maximum reverse recovery time (Note 2)	$T_{RR}$	150		250		500		ns
Peak Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 100						$\mu\text{A}$
Typical Junction Capacitance (Note 3)	$C_J$	55		46		38		pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	15						°C/W
	$R_{\theta JC}$	5						
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150						°C

Note: 1. Mounted on 15 mm\*12 mm\*1.6mmAL pad attach 195 mm\*110 mm\*10 mm steel plate

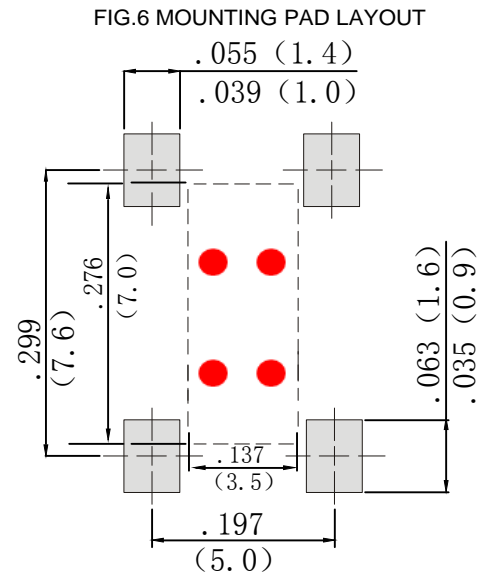
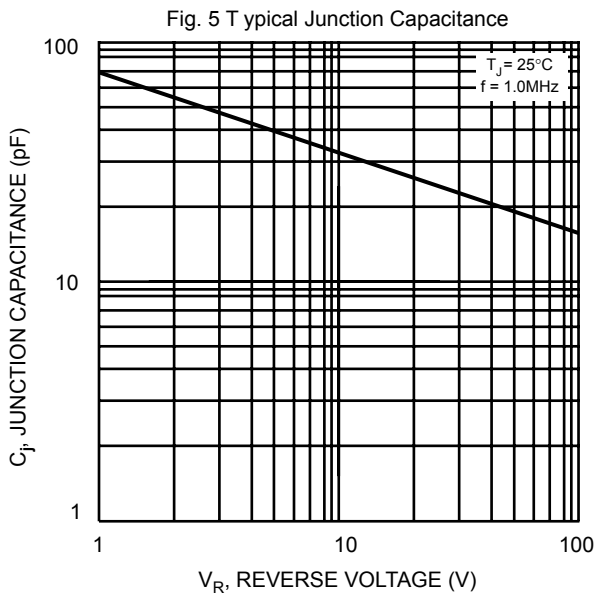
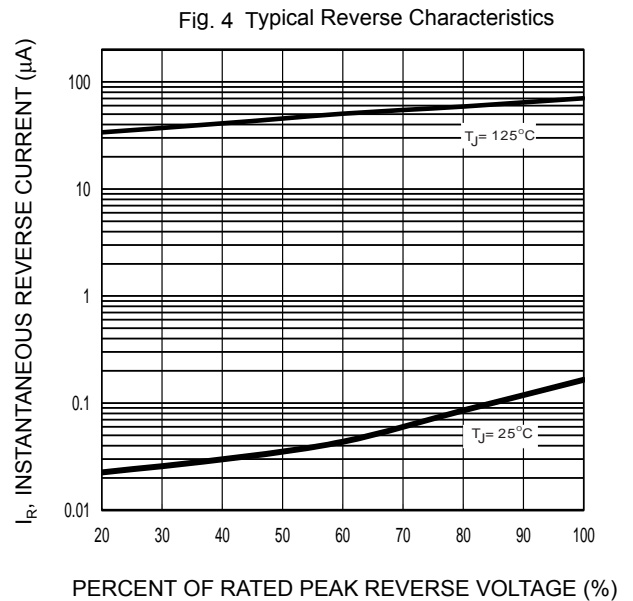
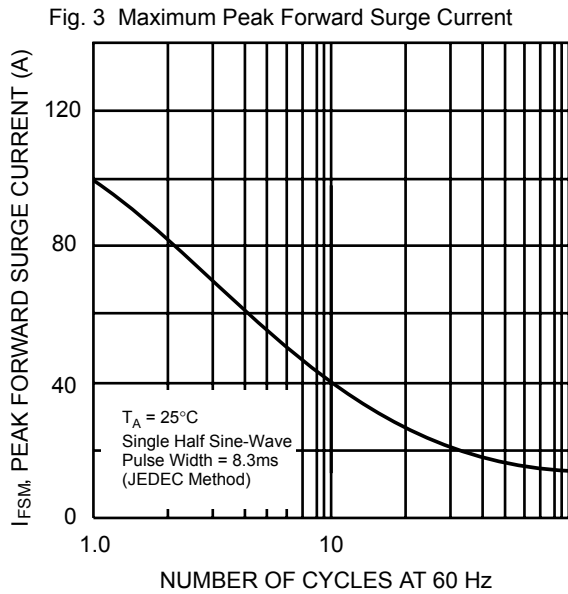
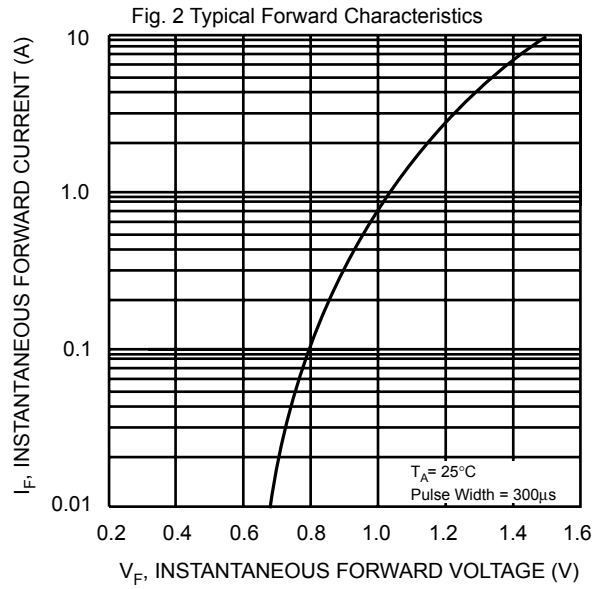
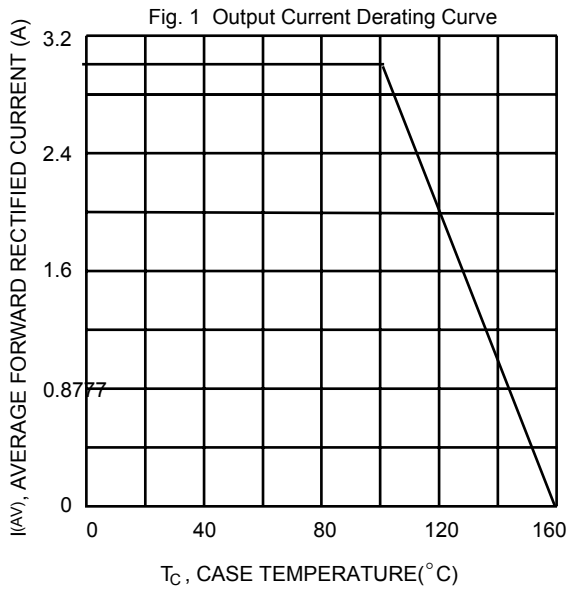
2. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$ .

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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□ solder resist and Cu free ● glue dot



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