



DBF31A THRU DBF310A

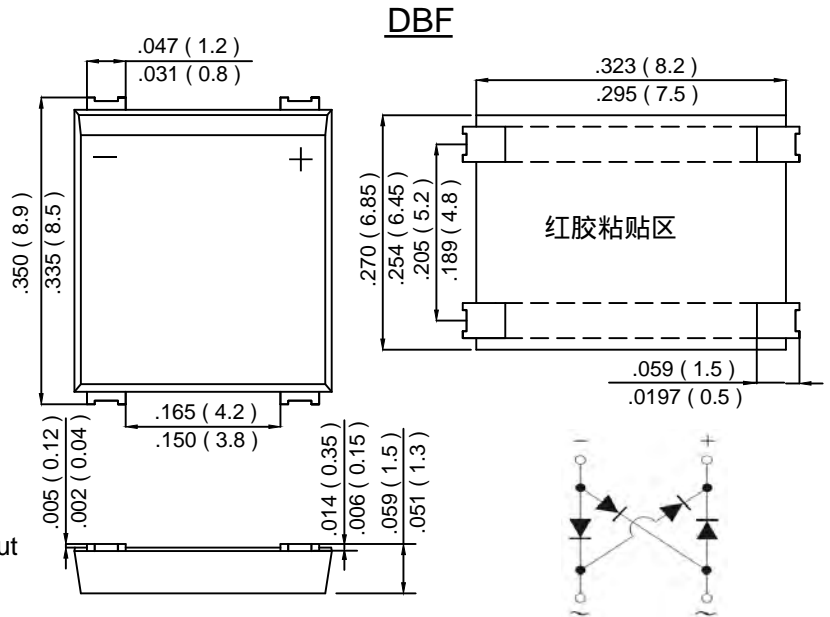
SINGLE PHASE 3.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-110A 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,Method208
- 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 | DBF31A | DBF32A | DBF34A | DBF36A | DBF38A | DBF310A | UNITS |
|---|-----------------|-------------|--------|--------|--------|--------|---------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | |
| DC Blocking Voltage | V_{DC} | | | | | | | |
| RMS Reverse Voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1)@ $T_C=100^\circ C$ | 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} | 110 | | | | | | A |
| I^2t Rating for Fusing (t < 8.3ms) | I^2t | 50.215 | | | | | | A ² s |
| Forward Voltage per element @ $I_F=1.5A$ @ $I_F=3.0A$ | V_{FM} | 0.95 1.0 | | | | | | V |
| Peak Reverse Current @ $T_J=25^\circ C$ At Rated DC Blocking Voltage @ $T_J=125^\circ C$ | I_R | 5.0 100 | | | | | | μA |
| Typical Junction Capacitance (Note 2) | C_J | 27 | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JA}$ | 15 | | | | | | °C/W |
| | $R_{\theta JC}$ | 5 | | | | | | |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55to+150 | | | | | | °C |

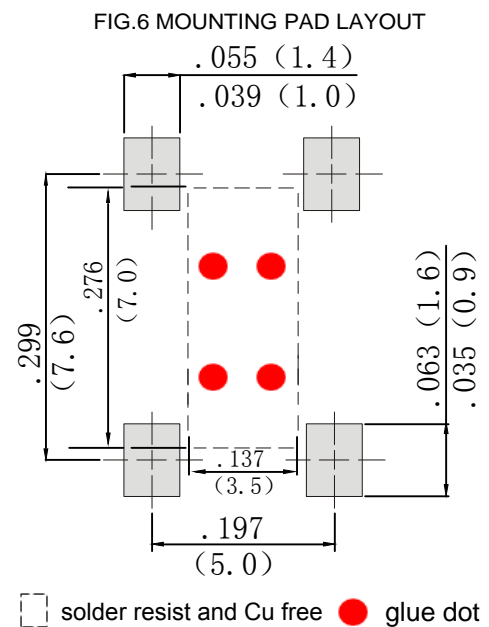
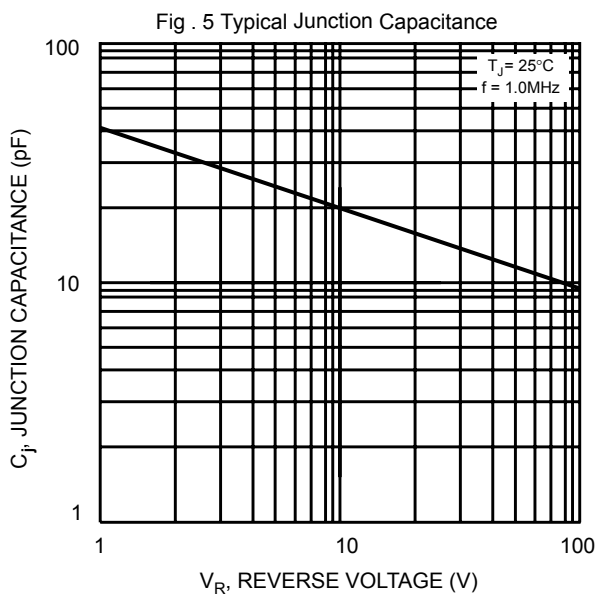
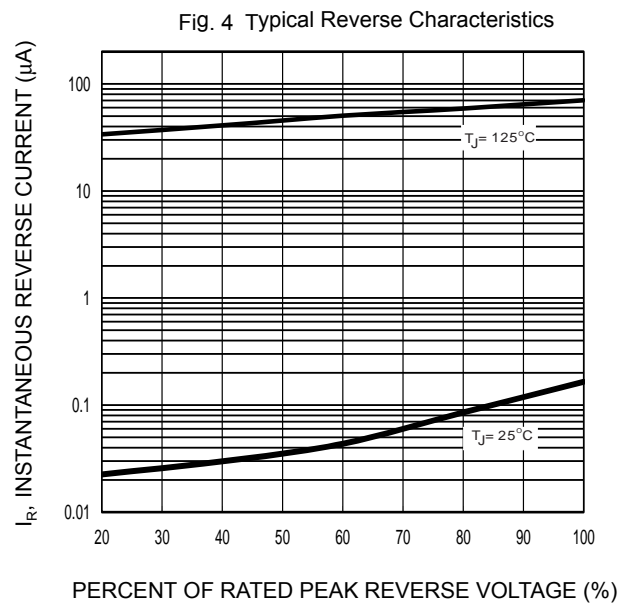
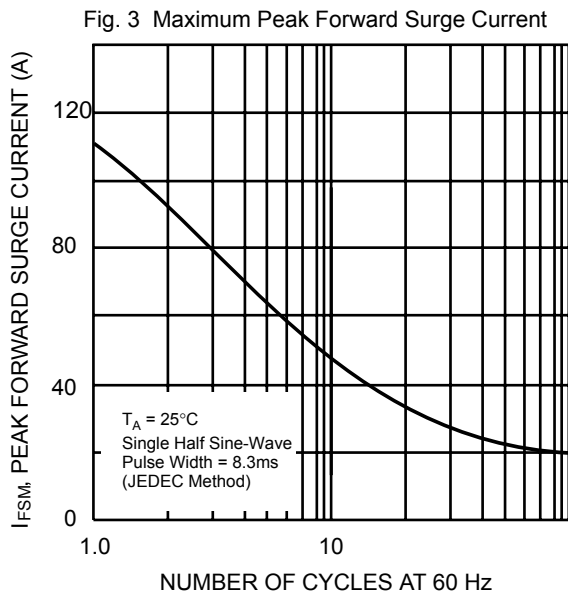
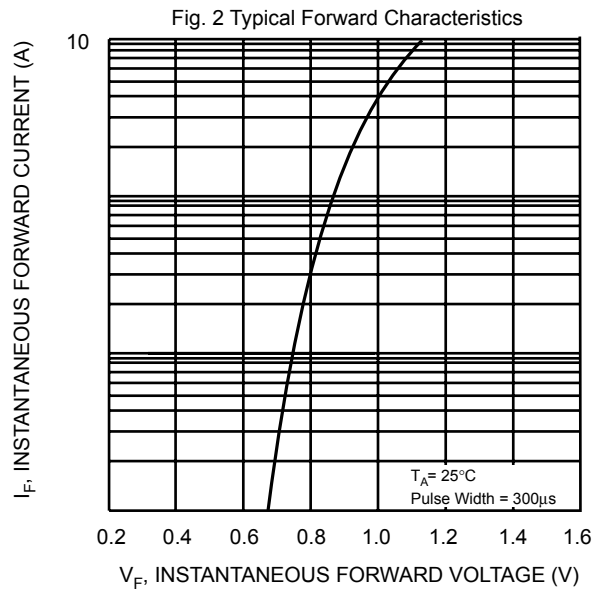
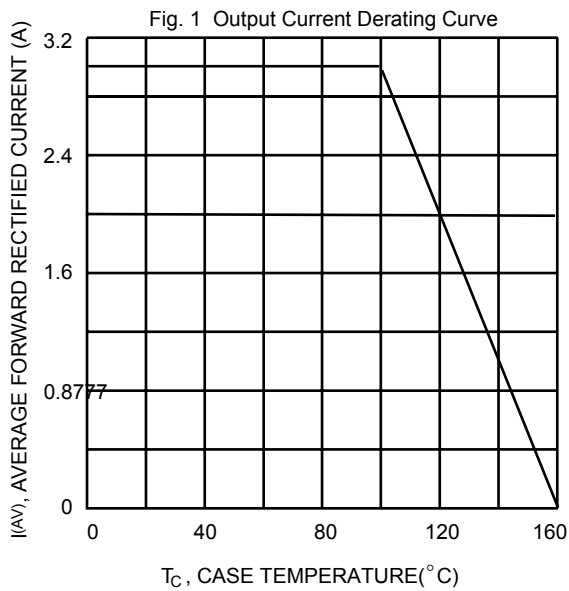
Note: 1. Mounted on glass epoxy PC board with 1.3mm solder pad.

2. Measured at 1.0 MHz and applied reverse voltage² of 4.0V D.C.

3. Mounted on 15 mm*12 mm*1.6mmAL pad attach 195 mm*110 mm*10 mm steel plate



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