DBF31A THRU DBF310A

SINGLE PHASE 3.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

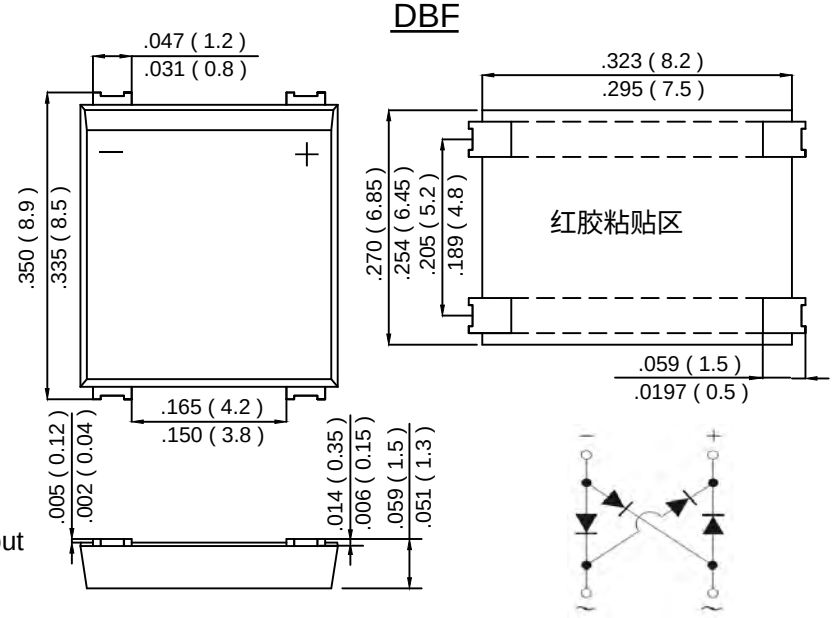
Features

- 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

DBF



dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=100℃	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^2s
Forward Voltage per element @IF=1.5A @IF=3.0A	V_{FM}	0.95 1.0						V
Peak Reverse Current @T_J=25℃ At Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 100						uA
Typical Junction Capacitance (Note 2)	C_J	27						pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	15 5						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150						℃

Note: 1. Mounted on glass epoxy PC board with 1.3mm solder pad.
2. Measured at 1.0 MHz and applied reverse voltage 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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Fig. 1 Output Current Derating Curve

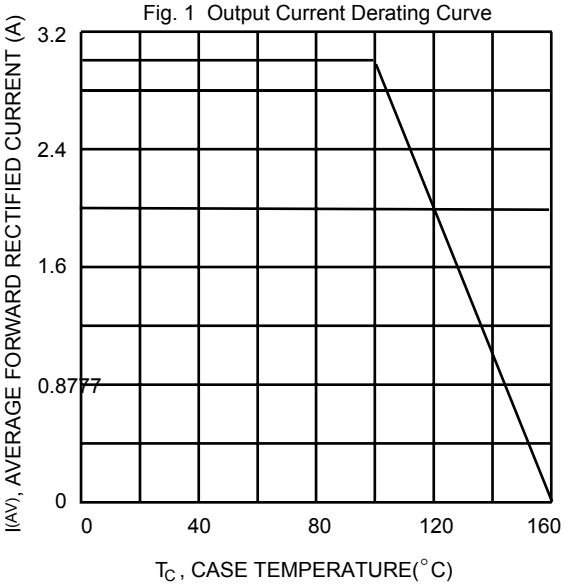


Fig. 2 Typical Forward Characteristics

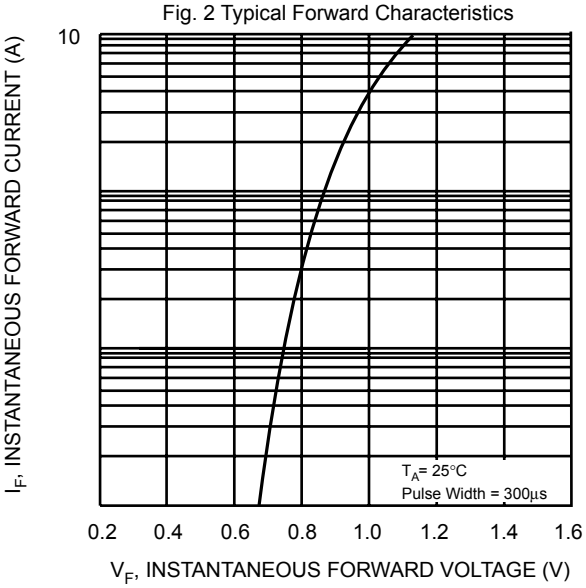


Fig. 3 Maximum Peak Forward Surge Current

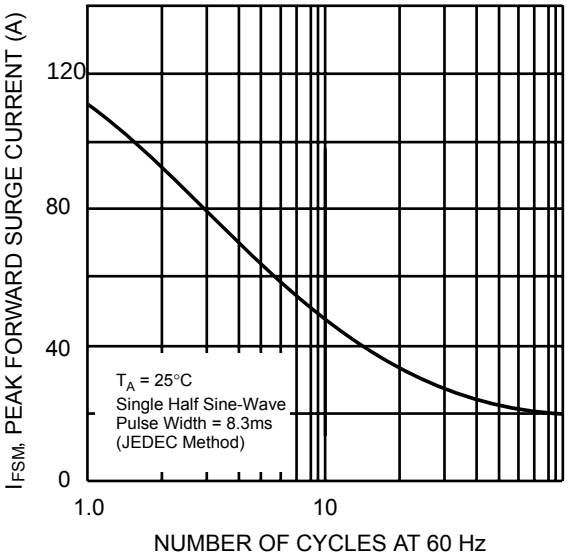


Fig. 4 Typical Reverse Characteristics

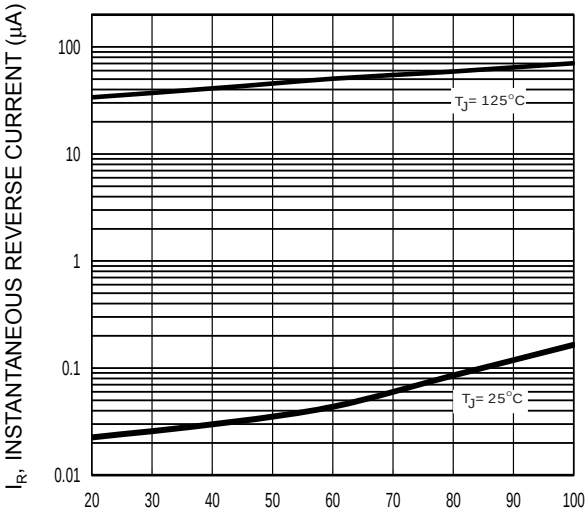


Fig . 5 Typical Junction Capacitance

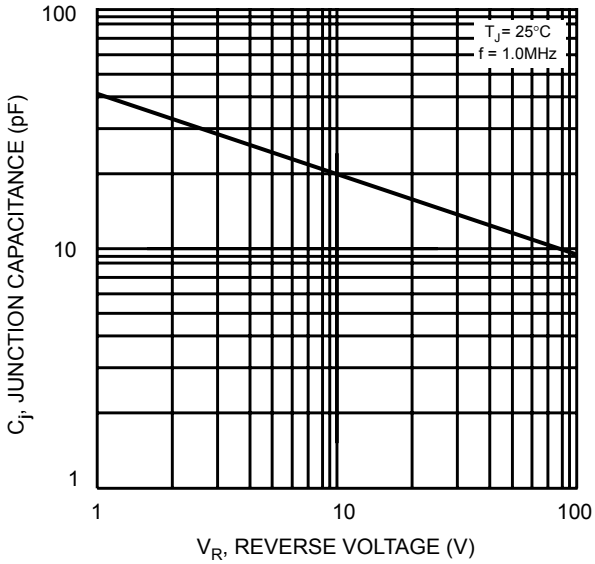
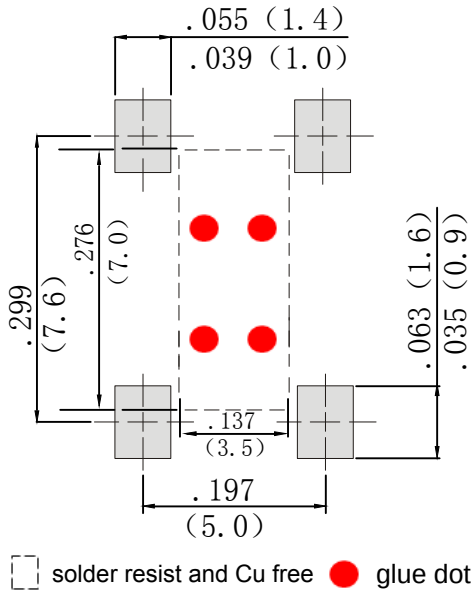


FIG.6 MOUNTING PAD LAYOUT



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