

# DBF151 THRU DBF1510

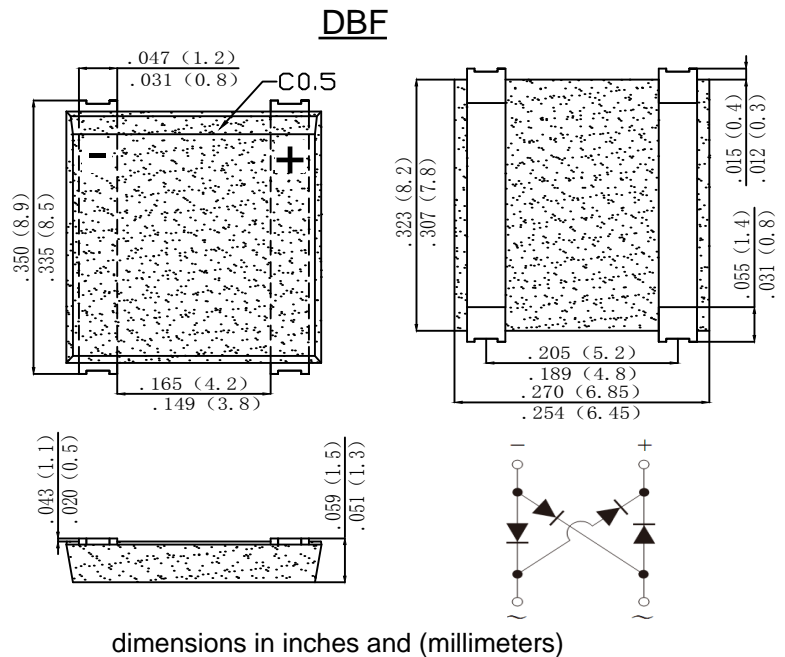
SINGLE PHASE 1.5 AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

## Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-60A 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:Any
- Marking:Type Number



## 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	DBF151	DBF152	DBF154	DBF156	DBF158	DBF1510	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)@ $T_c=90^\circ\text{C}$	$I_F(AV)$	1.5						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60						A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	14.94						$\text{A}^2\text{s}$
Forward Voltage per element @ $I_F=0.75\text{A}$ @ $I_F=1.5\text{A}$	$V_{FM}$	0.95 1.0						V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 200						$\mu\text{A}$
Typical Junction Capacitance per leg (Note 2)	$C_J$	35						pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	70						$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	15						
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150						$^\circ\text{C}$

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

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

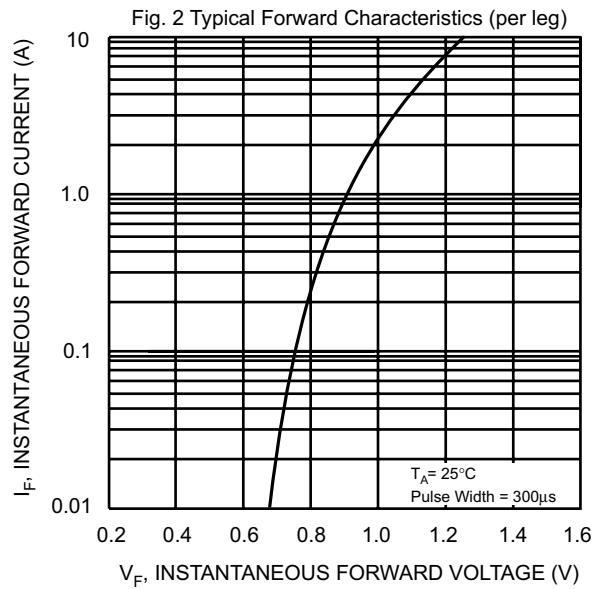
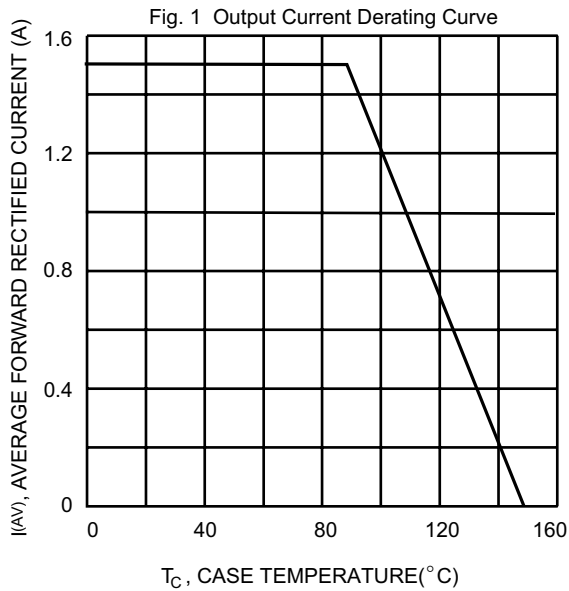


Fig. 3 Maximum Peak Forward Surge Current (per leg)

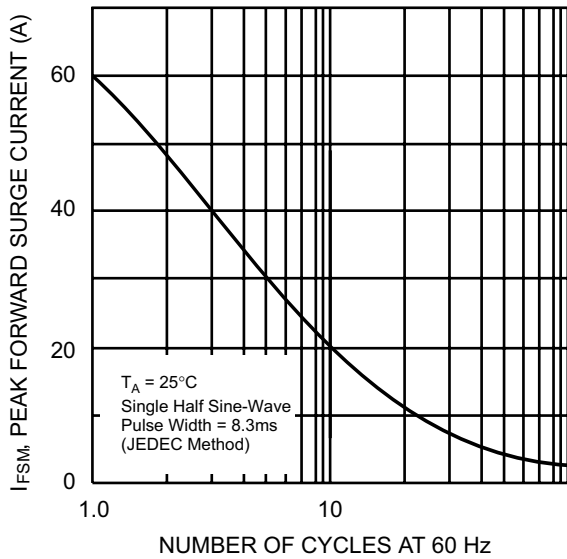


Fig. 4 Typical Junction Capacitance

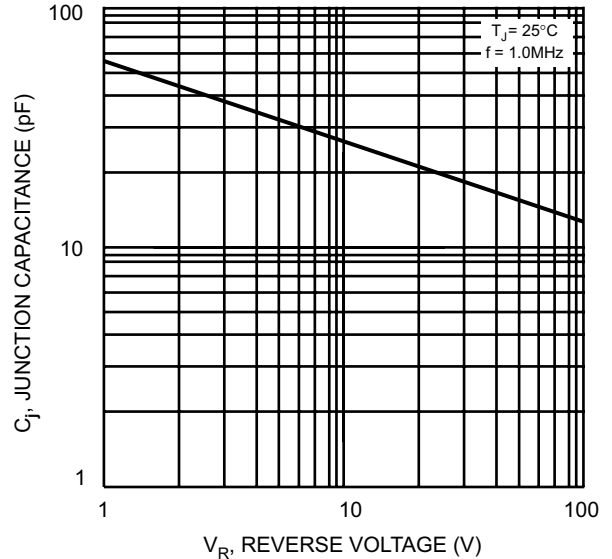


FIG.5 TYPICAL REVERSE CHARACTERISTICS

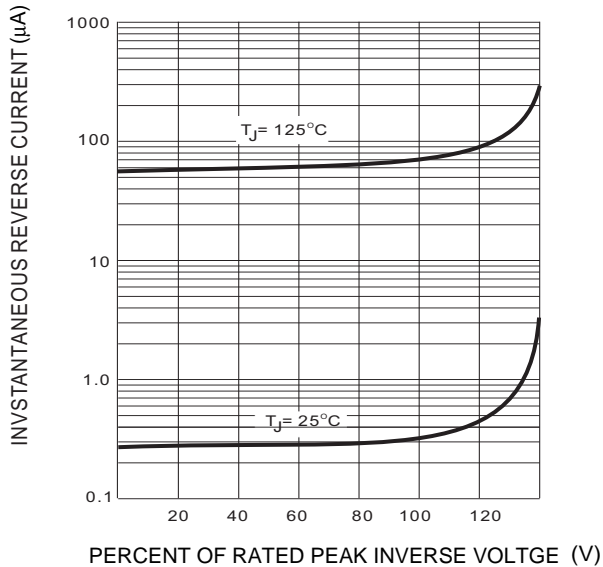
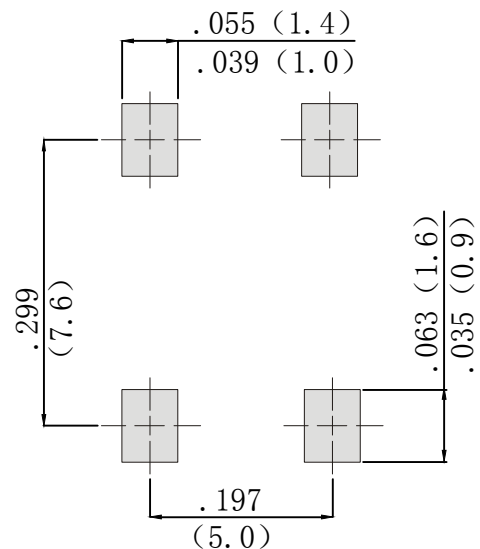


FIG.6 MOUNTING PAD LAYOUT



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