

# **GLASS PASSIVATED BRIDGE RECTIFIERS**

# REVERSE VOLTAGE 100 to 1000 Volts **FORWARD CURRENT 3 Amperes**

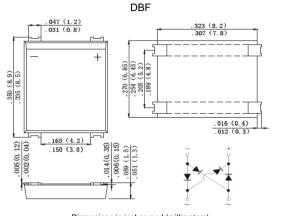
### **FEATURES**

- 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 · Polarity: As marked on Body

Mounting position: Any



#### Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Characteristics	Symbol	DBF301	DBF302	DBF304	DBF306	DBF308	DBF310	Unit			
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V			
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	280	420	560	700	V			
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	V			
Maximum Average Forward Rectified Current							А				
@T <sub>C</sub> =120°C (Note 1)	I <sub>(AV)</sub>	3									
Peak Forward Surge Current,											
8.3 ms Single Half Sine-wave	I <sub>FSM</sub>			110				Α			
Super Imposed on Rated Load (JEDEC)											
Peak Forward Voltage Drop Per element											
at I <sub>F</sub> =1.5A	$V_{F}$	0.95 1.0						V			
at I <sub>F</sub> =3A											
Maximum Reverse Current at Rated @T <sub>A</sub> =25°C		5 500						μА			
DC Blocking Voltage @T <sub>A</sub> =125°C	I <sub>R</sub>										
I <sup>2</sup> t Rating for Fusing (1ms≤t≤8.3ms)	l <sup>2</sup> t	50.215						A <sup>2</sup> s			
Typical Junction Capacitance per leg (Note 2)	CJ	45						pF			
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	15 5						°C/W			
	$R_{\theta JC}$										
Junction and StorageTemperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150						°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.
- 3. Mounted on 15 mm\*12 mm\*1.6 mmAL pad attach 195 mm\*110 mm\*10 mm steel plate



## **Rating and Characteristic Curves**

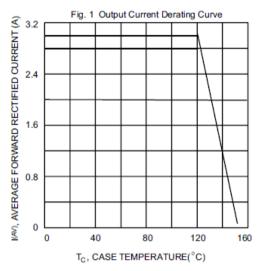


Fig. 3 Maximum Peak Forward Surge Current (per leg)

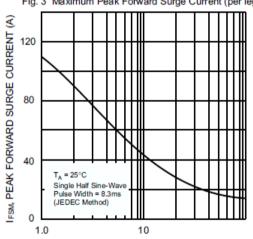
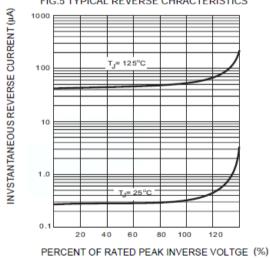
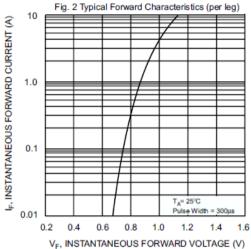


FIG.5 TYPICAL REVERSE CHRACTERISTICS

NUMBER OF CYCLES AT 60 Hz





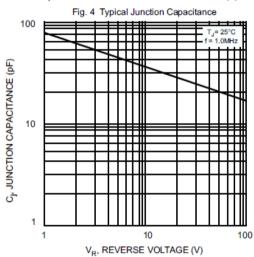


FIG.6 MOUNTING PAD LAYOUT

