

ABF2 THRU ABF10

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ♦ Small size, simple installation
- High surge current capability
- ◆ Glass passivated chip junction

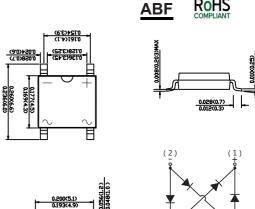


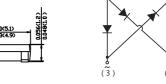
Case: JEDEC ABF Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: 82mg 0.0029oz





Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter Marking Code	SYMBOLS	MDD ABF2	MDD ABF4	MDD ABF6	MDD ABF8	MDD ABF10	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	400	600	800	1000	V
Maximum average forward rectified current	l _{F(AV)}	1.2					Α
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	İfsm	40					А
Maximum instantaneous forward voltage drop per leg at 1.2A	VF	1.1					V
Maximum DC reverse current Ta=25°C at rated DC blocking voltage Ta=125°C	I _R	5 100				uA	
Typical thermal resistance	RθJA RθJC	70 18				°C/W	
Typical junction capacitance	Сј	18				pF	
Operating temperature range	TJ	-55 to +150				°C	
storage temperature range	Тѕтс	-55 to +150				°C	

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2.Mounted on glass epoxy PC board with 4×1.5"×1.5" ($3.81\times3.81~\text{cm}$) copper pad.





Voltage Range - 200 to 1000 V olts Current - 1.2Ampere

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

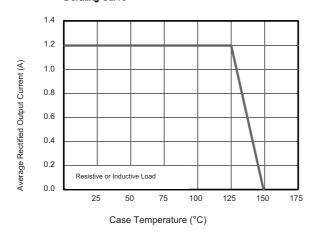


Fig.2 Typical Reverse Characteristics

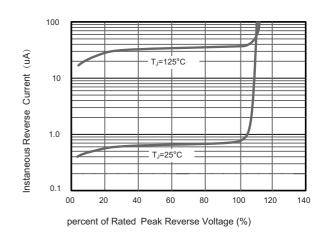


Fig.3 Typical Instaneous Forward
Characteristics T_J=25°C

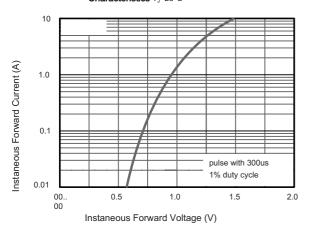


Fig.4 Typical Junction Capacitance

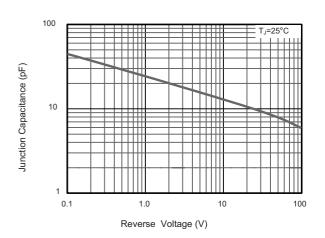
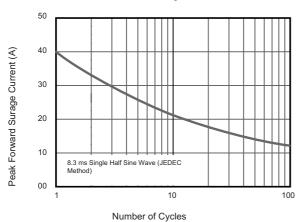


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.

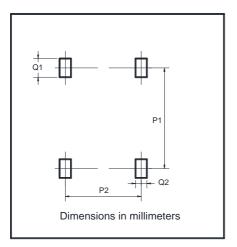
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Suggested Pad Layout



Dim	Min			
P1	5.72			
P2	4.00			
Q1	1.00			
Q2	0.90			