

PBAVXXWB Series Switching Diode

Feature

- > For surface mounted applications
- > Fast reverse recovery time
- > Ideal for automated placement
- ➤ Lead free in comply with EU RoHS 2011/65/EU directives



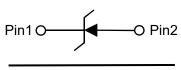
SOD-323(Top View)

Mechanical Characteristics

> Case: SOD-323

> Terminals: Solderable per MIL-STD-750, Method 2026

> Approx. Weight: 5.48mg / 0.00019oz



Circuit Diagram

Absolute maximum rating@25°C

Parameter	Symbol	PBAV19WB	PBAV20WB	PBAV21WB	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
RMS Reverse Voltage	V _{RMS}	71	106	141	V
Average Rectified Output Current	Io	200		mA	
Repetitive Peak Forward Current	I _{FRM}	625		mA	
Non-reptitive Peak Forward Surge Current@t < 8. 3ms	I _{FSM}	2		А	
Total Power Dissipation	P _{tot}	500		mW	
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150		℃	

Electrical characteristics per line@25°C

Parameter		Symbol	PBAV19WB	PBAV20WB	PBAV21WB	Units
Reverse BreakdownVoltage at I _R =100μA		V_{BR}	120 200 250		250	V
Maximum Forward Voltage	at 100 mA at 200 mA	V _F	1.00 1.25			V
Maximum DC Reverse Current at Rated Voltage	DC Blocking	I _R	0.1			μA
Typical Junction Capacitance at V _R =0V,	ical Junction Capacitance at V _R =0V, f=1MHz		5		pF	
Maximum Reverse Recovery Time 1)		t _{rr}	50		ns	

Notes:

1) Measured with IF = 0.5 A, IR = 1 A, Irr = 0.25 A

Typical Characteristics

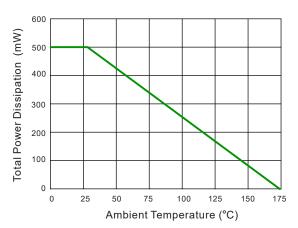


Fig.1 Power Derating Curve

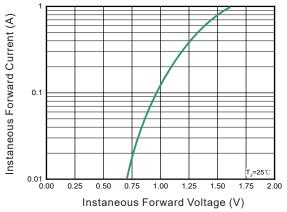


Fig.3 Typical Instaneous Forward Characteristics

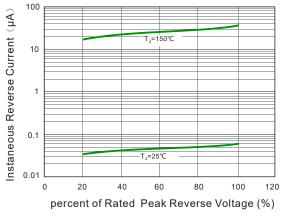


Fig.2 Typical Reverse Characteristics

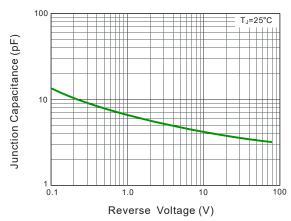
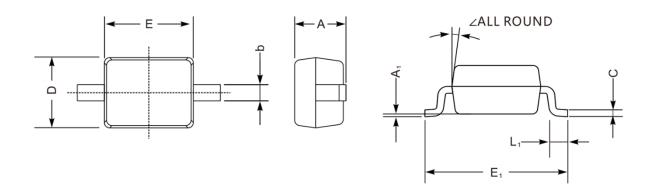
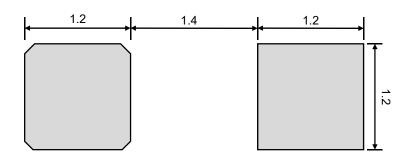


Fig.4 Typical Junction Capacitance

Product dimension (SOD-323)



Dim	Millim	neters	Inches		
	Min	Max	Min	Max	
Α	0.80	1.10	0.031	0.043	
A1	-	0.20	-	0.008	
С	0.08	0.15	0.003	0.006	
D	1.20	1.40	0.047	0.055	
E	1.40	1.80	0.055	0.071	
E1	2.55	2.75	0.100	0.108	
b	0.25	0.40	0.010	0.016	
L1	0.20	0.45	0.008	0.018	
	9°		9°		



Suggested PCB Layout

Unit:mm

IMPORTANT NOTICE

and Prisemi are registered trademarks of Prisemi Electronics Co., Ltd (Prisemi), Prisemi reserves the right to make changes without further notice to any products herein. Prisemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Prisemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in Prisemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Prisemi does not convey any license under its patent rights nor the rights of others. The products listed in this document are designed to be used with ordinary electronic equipment or devices, Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Website: http://www.prisemi.com
For additional information, please contact your local Sales Representative.

©Copyright 2009, Prisemi Electronics

Prisemi is a registered trademark of Prisemi Electronics.

All rights are reserved.