

BAV19WS~ BAV21WS

SWITCHING DIODE SILICON EPITAXIAL PLANAR HIGH VOLTAGE DIODE

DESCRIPTION

The BAV19WS~ BAV21WS is available in SOD-323 Package

FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Available in SOD-323 Package

ORDERING INFORMATION

Package Type	Package Type Part Number	
SOD-323	BAV19WS	
	BAV20WS	
	BAV21WS	
Note SPQ: 3,000pcs/Reel		
AiT provides all RoHS Compliant Products		

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ABSOLUTE MAXIMUM RATINGS

 $T_A = 25^{\circ}C$

Parameter		Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	120	200	250	V
Reverse Voltage		V _R	100	150	200	V
Average Rectified Forward Current		I _{F(AV)}	200		mA	
Forward Continuous Current		I _{FM}	400		mA	
Repetitive Peak Forward Current		I _{FRM}	625		mA	
Non-Repetitive Peak Forward	t=1us	1	2.5		А	
Surge Current	t=1s	IFSM	0.5			
Power Dissipation		P _{tot}	200		mW	
Operating and Storage Temperature Rage		T_{J} , T_{STG}	-65 ~ +150		°C	

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

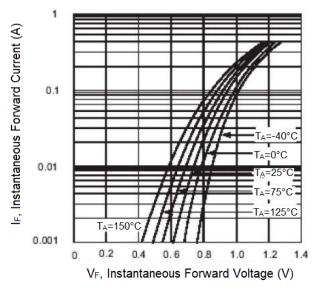
T_A= 25°C

Parameter	Symbol	Conditions		Min.	Max.	Unit
			BAV19WS	120		
Reverse Breakdown Voltage	$V_{(BR)R}$	I _R =100uA	BAV20WS	200	-	V
			BAV21WS	250		
		V _R =100V	BAV19WS			
Reverse Current	I _R	V _R =150V	BAV20WS	-	100	nA
		V _R =200V	BAV21WS			
Farment Vallage	\/_	I _F =100mA			1	V
Forward Voltage	V _F	I _F =200mA		1	1.25	V
Total Capacitance	Ст	V _R =0V , f=1MHz		1	5	pF
Davis Davis Time	4	$I_F=I_R=30$ mA ,		-	50	ns
Reverse Recovery Time	t _{rr}	$I_{RR}\text{=}0.1x~I_{R}$, $R_{L}\text{=}100\Omega$				

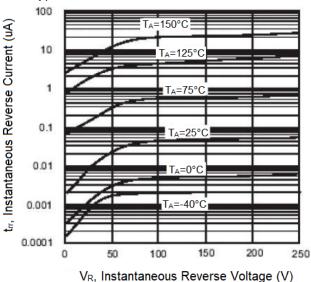
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TYPICAL PERFORMANCE CHARACTERISTICS

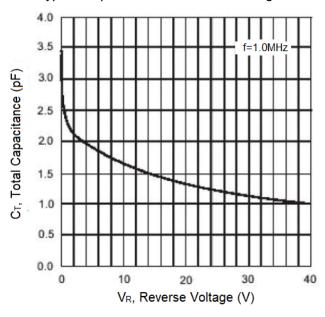
1. **Typical Forward Characteristics**



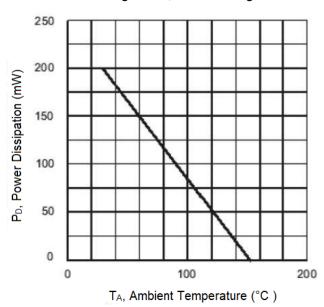
2. Typical Reverse Characteristics



3. Typical Capacitance vs. Reverse Voltage



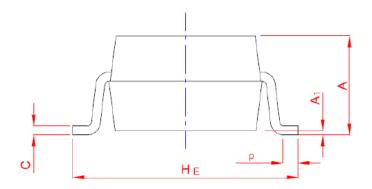
4. Power Derating Curve, Total Package

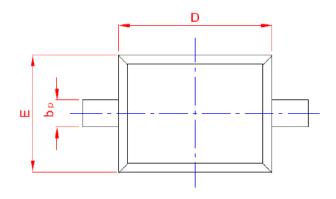


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PACKAGE INFORMATION

Dimension in SOD-323 (Unit: mm)





Symbol	Min	Max
Α	0.90	1.20
bp	0.25	0.40
С	0.10	0.15
D	1.60	1.80
Е	1.15	1.35
HE	2.30	2.80
A1	0.01	0.10
Lp	0.20	0.50

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AiT Components assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.

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