

BAV19WS-BAV21WS SWITCHING DIODE



Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Mechanical Characteristics

- Case: SOD-323, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208

Maximum Ratings@T_A=25°C unless otherwise specified

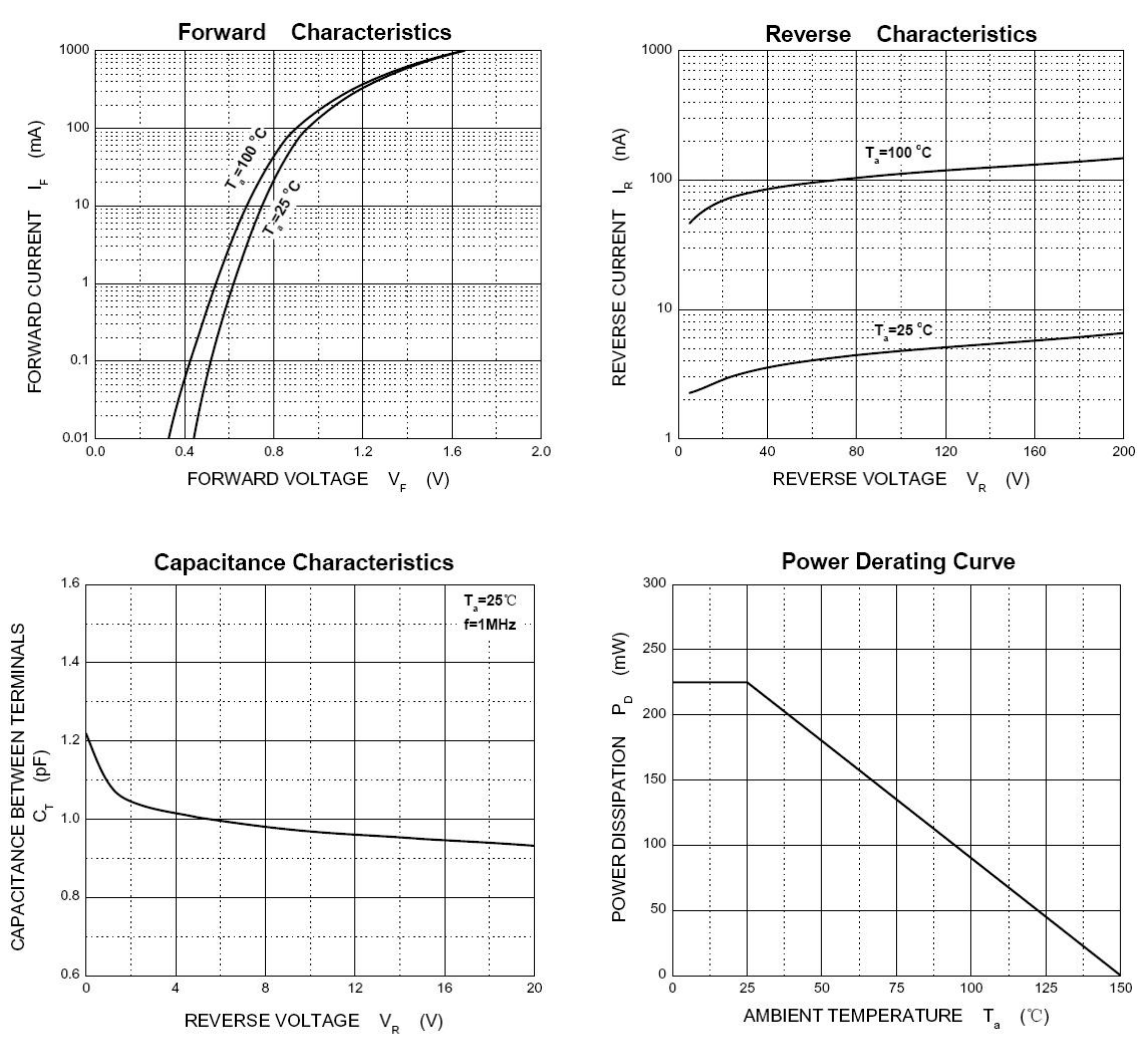
Characteristic	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Marking Code		A8	T2	T3	
Non-Repetitive Peak Reverse Voltage	V _{RM}	120	200	250	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	150	200	V
Working Peak Reverse Voltage	V _{RWM}				
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	71	106	141	
Average Rectified Output Current	I _O	200			mA
Forward continuous current	I _{FM}	400			mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @t=1.0ms @ t=1.0s	I _{FSM}	2.5 0.5			A
Power Dissipation	P _d	250			mW
Repetitive Peak Forward Current	I _{FRM}	625			mA
Typical Thermal Resistance Junction to Ambient	R _{θJA}	500			°C/W
Junction Temperature Range	T _J	150			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Electrical Characteristics@ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage*	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$	-	0.95 1.06	1.00 1.25	V
Reverse Leakage Current*	I_R	$V_R=100\text{V}$ $V_R=150\text{V}$ $V_R=200\text{V}$	-	0.007	0.1	μA
Diode capacitance	C_T	$V_R=0\text{V}, f=1.0\text{MHz}$	-	1.2	5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\ \Omega$	-	-	50	ns

* Pulse width < 300 μs , duty cycle < 2%

Ratings and Characteristics Curves



Ordering Information

Device	Package	Shipping
BAV19WS-BAV21WS	SOD-323 (Pb-Free)	3000pcs / reel

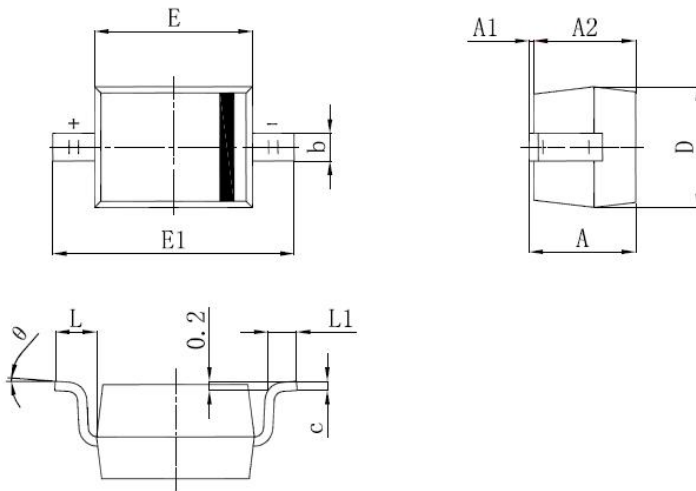
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



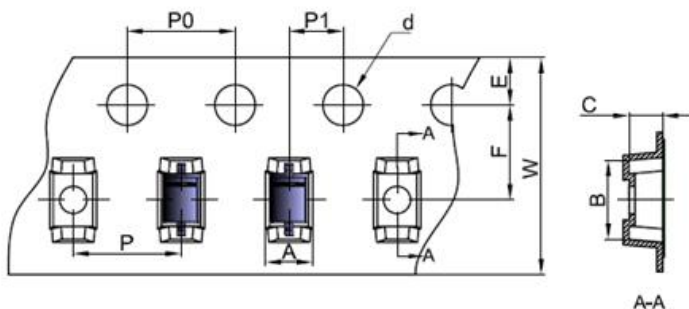
A8 = Marking Code

Mechanical Dimensions SOD-323



SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	-	1.000	-	0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Carrier Tape Specification SOD-323



SYMB OL	Millimeters	
	Min.	Max.
B	2.85	2.95
C	1.20	1.30
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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