



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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

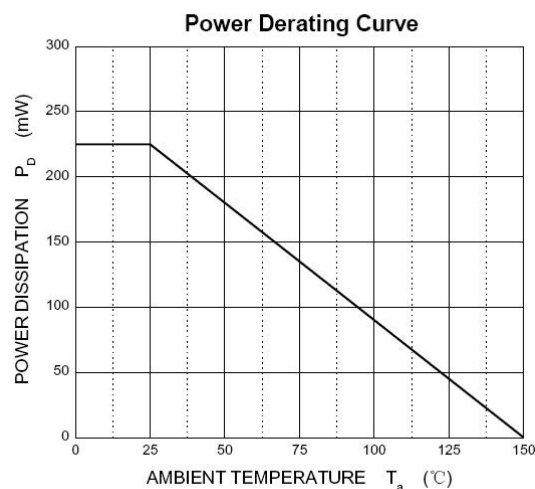
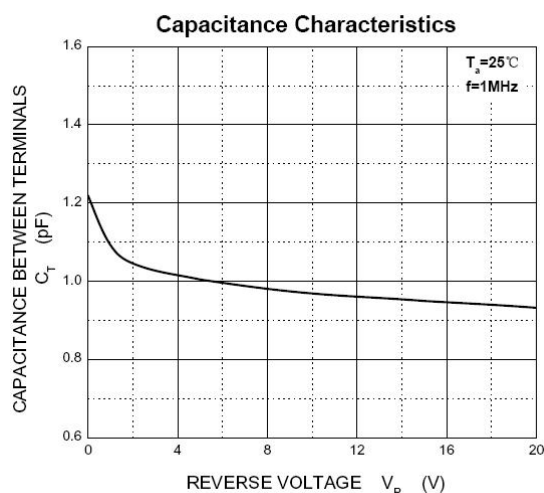
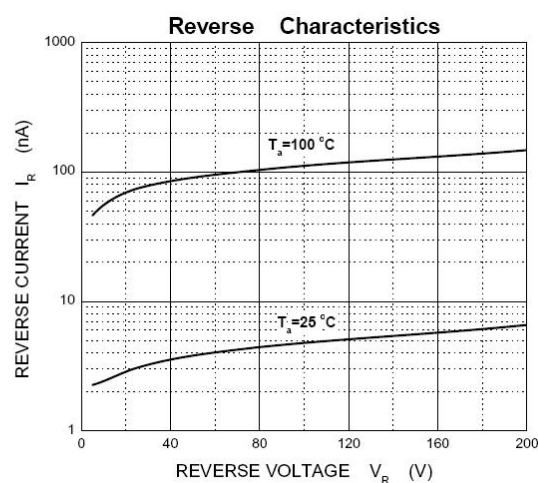
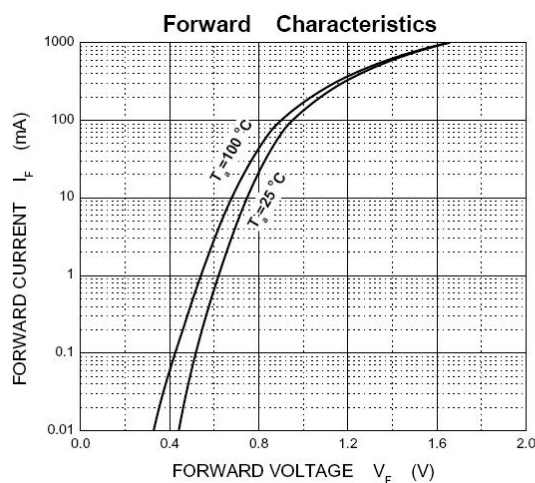
Maximum Ratings@T_A=25°C unless otherwise specified

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* BAV19WS BAV20WS BAV21WS	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%

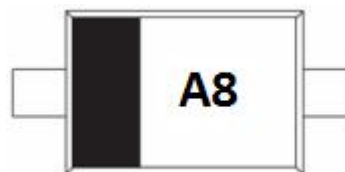
Ratings and Characteristics Curves


Ordering Information

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

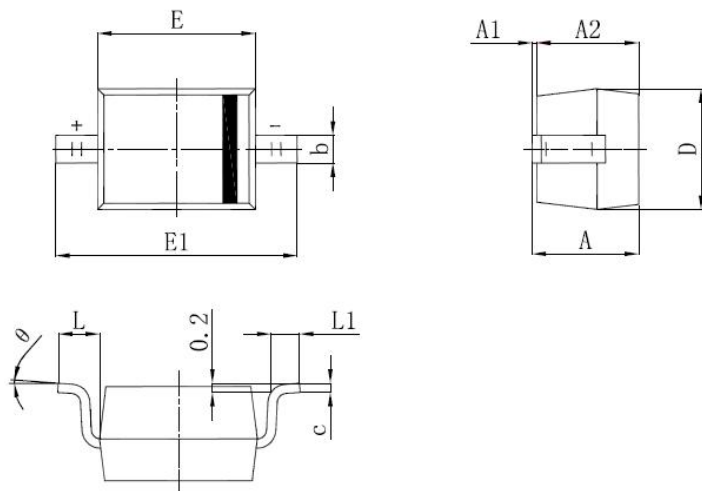
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



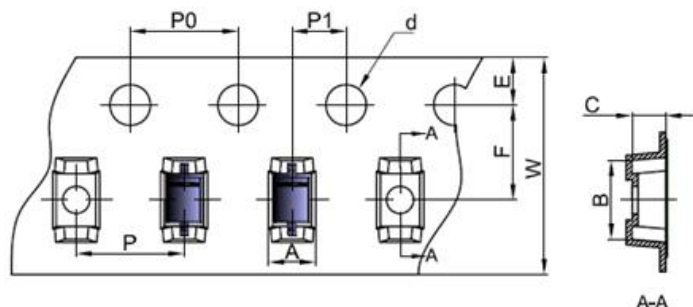
A8 = Marking Code

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

Technical Data
Data Sheet N0590, Rev. B



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