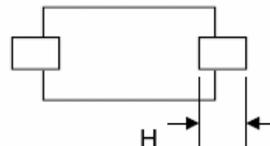
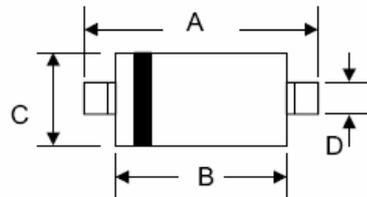




Technical Data  
Data Sheet N0590, Rev. -

**Features**

- High Conductance
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material – UL Recognition Flammability Classification 94V-O
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



SOD-323				
Dim	Min	Max	Min	Max
A	2.30	2.70	0.091	0.106
B	1.75	1.95	0.069	0.077
C	1.15	1.35	0.045	0.053
D	0.25	0.35	0.010	0.014
E	0.05	0.15	0.002	0.006
G	0.70	0.95	0.028	0.037
H	0.30	—	0.012	—
	In mm		In inch	

**Mechanical Data**

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: BAV19WS A8  
BAV20WS A80  
BAV21WS A82

**Maximum Ratings** @ $T_A=25^{\circ}C$  unless otherwise specified

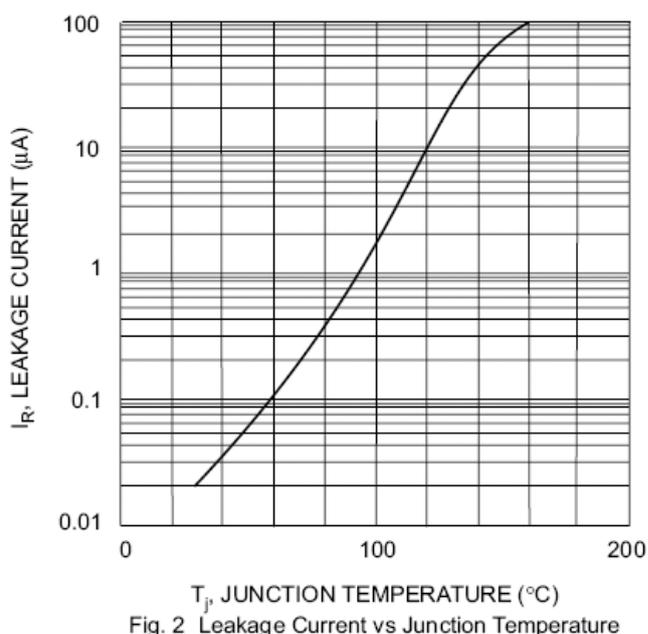
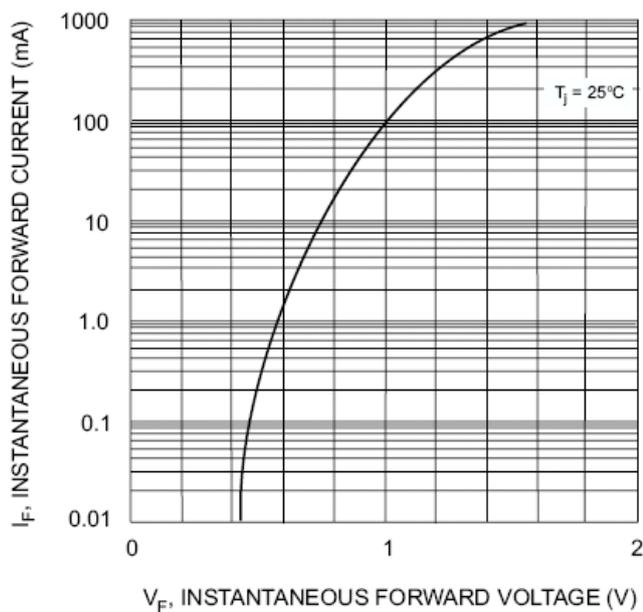
Characteristic	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	120	200	250	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	150	200	V
Working Peak Reverse Voltage	$V_{RWM}$				
DC Blocking Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	70	105	140	V
Forward Continuous Current (Note 1)	$I_F$	400			mA
Average Rectified Output Current (Note 1)	$I_o$	200			mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu s$ @ $t = 1.0s$	$I_{FSM}$	2.5 0.5			A
Power Dissipation	$P_d$	200			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625			K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150			$^{\circ}C$



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

Characteristic	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Forward Voltage Drop @ $I_F = 100\text{mA}$	$V_{FM}$	1.0			V
Peak Reverse Leakage Current @ Rated DC Blocking Voltage	$I_{RM}$	100			nA
Typical Junction Capacitance ( $V_R = 0\text{V DC}$ , $f = 1.0\text{MHz}$ )	$C_j$	5.0			pF
Reverse Recovery Time (Note 2)	$t_{rr}$	50			nS

Note: 1. Valid provided that terminals are kept at ambient temperature.  
2. Measured with  $I_F = I_R = 30\text{mA}$ ,  $I_{RR} = 0.1 \times I_R$ ,  $R_L = 100\ \Omega$ .





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