

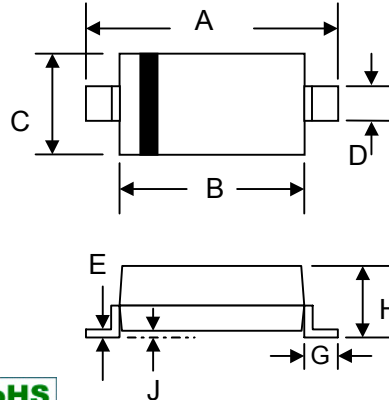


BAV19W THRU BAV21W

SURFACE MOUNT FAST SWITCHING DIODE

Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)



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

Characteristic	Symbol	BAV19W	BAV20W	BAV21W	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_{FM}	400			mA
Average Rectified Output Current (Note 1)	I_O	200			mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\text{ms}$ @ $t = 1.0\text{s}$	I_{FSM}	2.5 0.5			A
Power Dissipation	P_d	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	500			K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150			$^\circ\text{C}$

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

Characteristic	Symbol	BAV19W	BAV20W	BAV21W	Unit
Forward Voltage Drop @ $I_F = 100\text{mA}$	V_{FM}	1.0			V
Peak Reverse Leakage Current At Rated DC Blocking Voltage	I_{RM}	100	150	200	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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RATINGS AND CHARACTERISTIC CURVES

