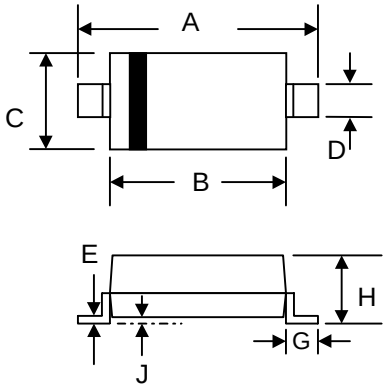
BAV19W – BAV21W

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.)
- Marking: BAV19W A8
  BAV20W A80
  BAV21W A82

Maximum Ratings @T_A=25°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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	150	200	V
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 = 1.0ms @ t = 1.0s	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			°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	BAV19W	BAV20W	BAV21W	Unit
Forward Voltage Drop @ I_F = 100mA	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 = 0V DC, f = 1.0MHz)	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 = 30mA, I_{RR} = 0.1 x I_R, R_L = 100Ω.

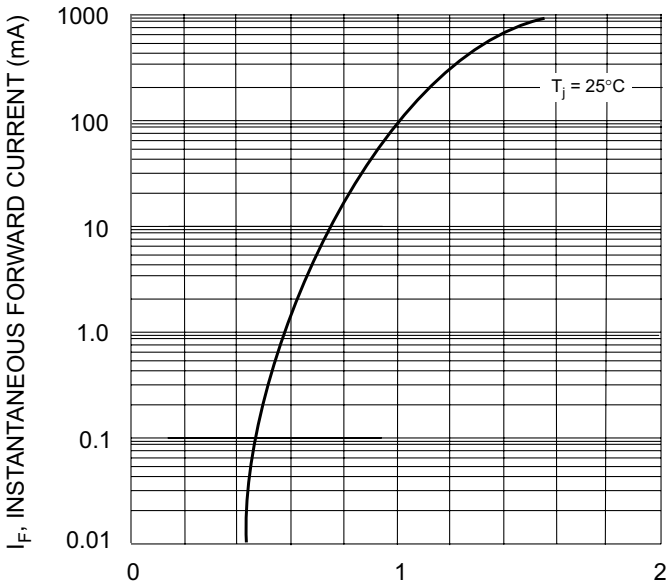


Fig. 1 Forward Characteristics

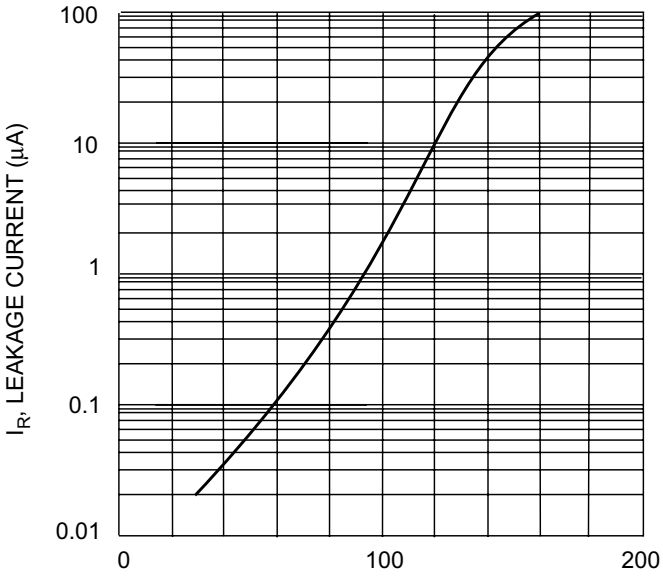


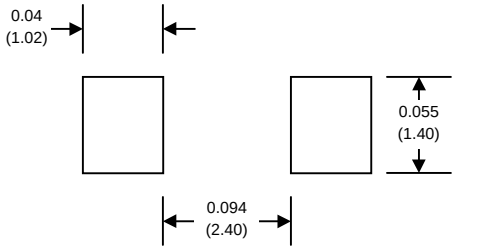
Fig. 2 Leakage Current vs Junction Temperature

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
BAV19W-T1	SOD-123	3000/Tape & Reel
BAV19W-T3	SOD-123	10000/Tape & Reel
BAV20W-T1	SOD-123	3000/Tape & Reel
BAV20W-T3	SOD-123	10000/Tape & Reel
BAV21W-T1	SOD-123	3000/Tape & Reel
BAV21W-T3	SOD-123	10000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.
◆T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.
Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT



inches(mm)

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