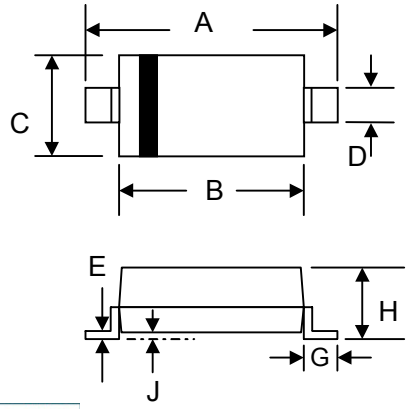
BAV16W

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.)

RoHS Compliant

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation (Note 1)	P_d	410	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	315	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	Value	Unit
Forward Voltage Drop @ I_F = 10mA	V_{FM}	1.0	V
Peak Reverse Leakage Current @ V_R = 20V @ V_R = 75V	I_{RM}	25 5.0	nA μA
Typical Junction Capacitance (V_R = 0V DC, f = 1.0MHz)	C_j	2.0	pF
Reverse Recovery Time (Note 2)	t_{rr}	4.0	nS

Note: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with I_F = I_R = 10mA, I_{RR} = 0.1 x I_R, R_L = 100Ω.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- FORWARD CHARACTERISTICS

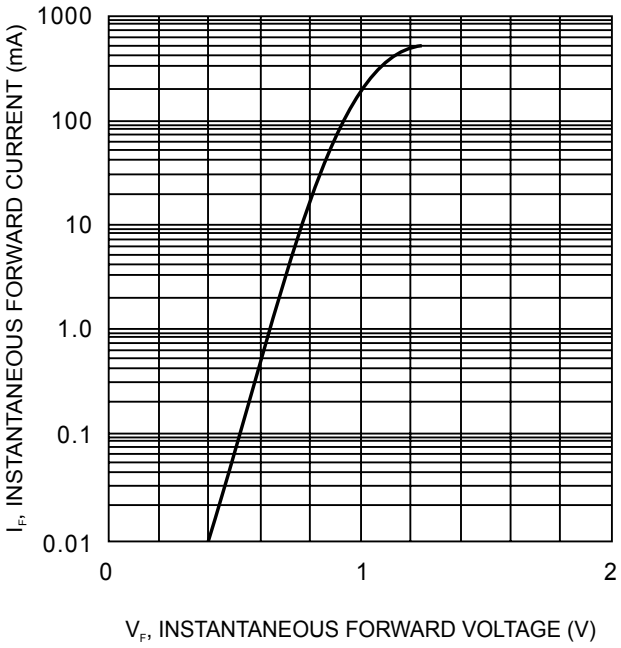

FIG.2- LEAKAGE CURRENT VS JUNCTION TEMPERATURE

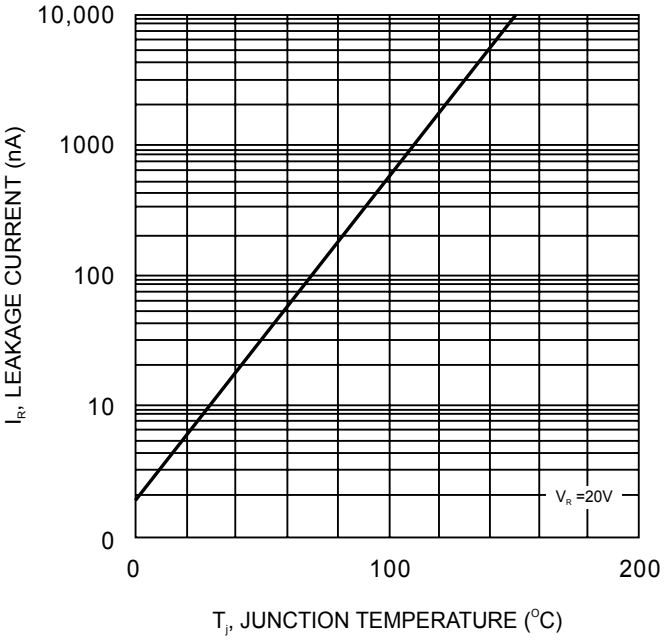

FIG.3- ADMISSIBLE POWER DISSIPATION VS AMBIENT TEMPERATURE