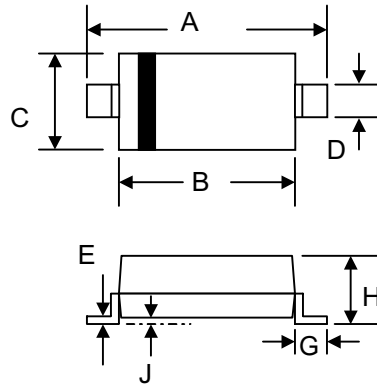


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Features

- 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	Min	Max
A	3.6	3.9	0.14	0.154
B	2.5	2.8	0.098	0.110
C	1.4	1.8	0.055	0.070
D	0.5	0.7	0.020	0.028
E	—	0.2	—	0.008
G	0.4	—	0.016	—
H	0.95	1.35	0.037	0.053
J	—	0.12	—	0.005
	In mm		In inch	

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: A6

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

Characteristic	Symbol	BAV16W	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 @ $t = 1.0\mu\text{s}$ @ $t = 1.0\text{s}$	I_{FSM}	2.0 1.0	A
Power Dissipation (Note 1)	P_d	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	357	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	BAV16W	Unit
Forward Voltage Drop @ $I_F = 10\text{mA}$	V_{FM}	0.855	V
Peak Reverse Leakage Current @ $V_R = 75\text{V}$	I_{RM}	1.0	μA
Typical Junction Capacitance ($V_R = 0\text{V DC}, f = 1.0\text{MHz}$)	C_j	2.0	pF
Reverse Recovery Time (Note 2)	t_{rr}	6.0	nS

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

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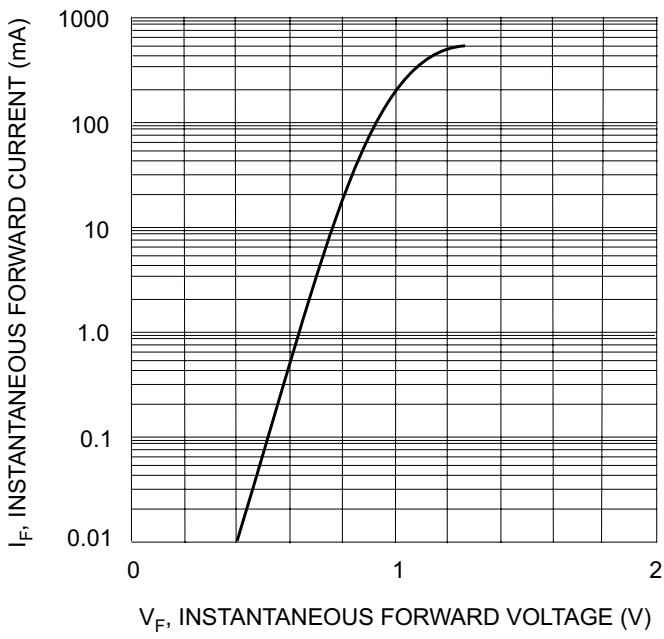


Fig. 1 Forward Characteristics

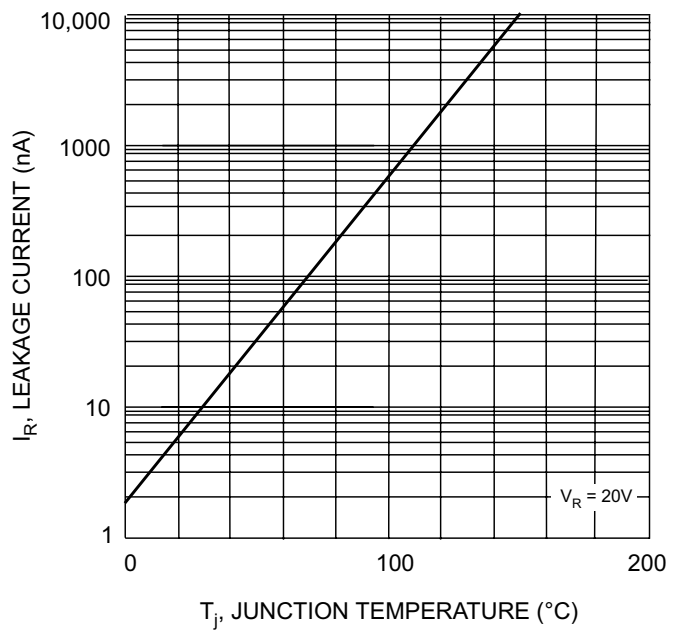


Fig. 2 Leakage Current vs Junction Temperature

TECHNICAL DATA

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