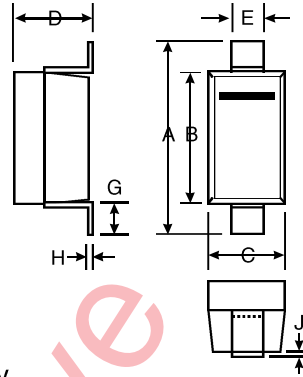


Features

Fast Switching Speed
 Surface Mount Package Ideally Suited for Automatic Insertion
 For General Purpose Switching Applications
 High Conductance

Mechanical Data

Case: SOD-123, Molded Plastic
 Terminals: Solderable per MIL-STD-202, Method 208
 Polarity: Cathode Band
 Marking: Date Code and Type Code or Date Code only
 Weight: 0.01grams (approx.)



SOD-123		
Dim	Min	Max
A	3.55	3.85
B	2.55	2.85
C	1.40	1.70
D		1.35
E	0.55 Typical	
G	0.25	
H	0.15 Typical	
J		0.10
All Dimensions in mm		

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)}	71	106	141	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
Repetitive Peak Forward Surge Current	I _{FRM}	625			mA
Power Dissipation	P _d	250			mW
Thermal Resistance Junction to Ambient Air (Note 1)	R _{qJA}	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	Min	Max	Unit	Test Condition
Maximum Forward Voltage	V _{FM}		1.0 1.25	V	I _F = 100mA I _F = 200mA
Maximum Peak Reverse Current @ Rated DC Blocking Voltage	I _{RM}		100 15	nA mA	T _j = 25°C T _j = 100°C
Junction Capacitance	C _j		5.0	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{rr}		50	ns	I _F = I _R = 30mA, I _{rr} = 0.1 x I _R , R _L = 100W

Notes: 1. Valid provided that electrodes are kept at ambient temperature.

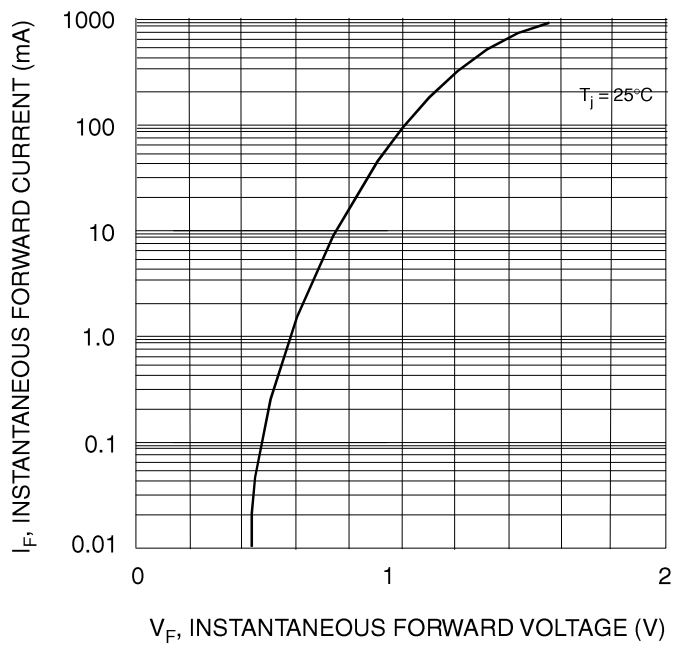


Fig. 1 Forward Characteristics

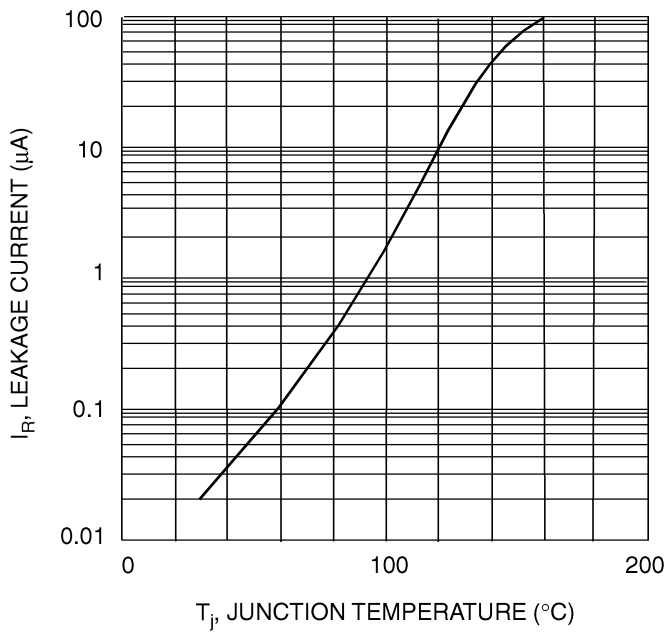


Fig. 2 Leakage Current vs Junction Temperature