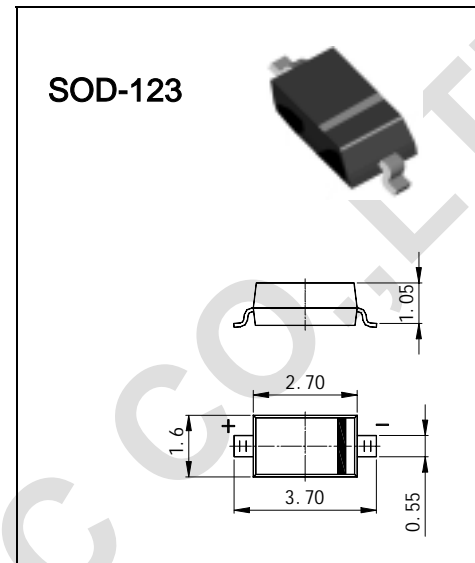


Features

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



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	V _{RRM}	100	150	200	V
Working Peak Reverse Voltage	V _{RWM}				
DC Blocking Voltage	V _R				
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 _{θJA}		500		°C/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 (Note 2)	V _{FM}	—	1.0 1.25	V	I _F = 100mA I _F = 200mA
Maximum Peak Reverse Current @ Rated DC Blocking Voltage (Note 2)	I _{RM}	—	100 15	nA μA	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 = 100

- Notes:
1. Valid provided that electrodes are kept at ambient temperature.
 2. Short duration pulse test used to minimize self-heating effect.

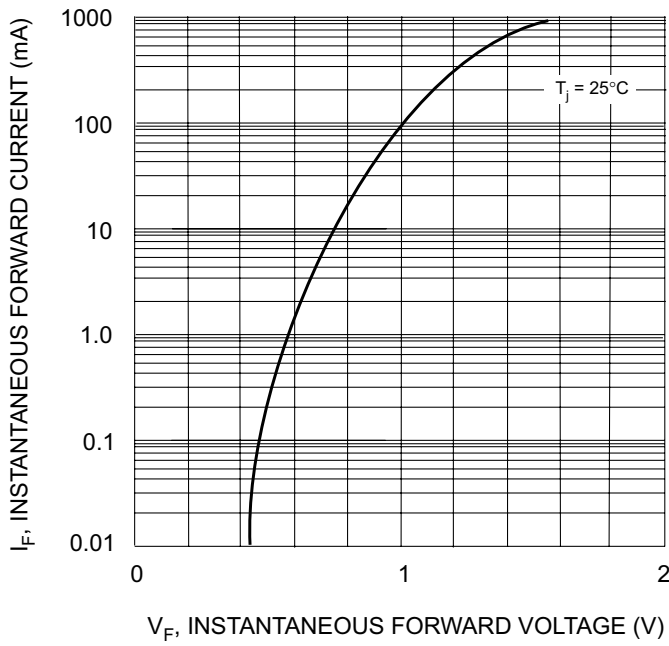


Fig. 1 Forward Characteristics

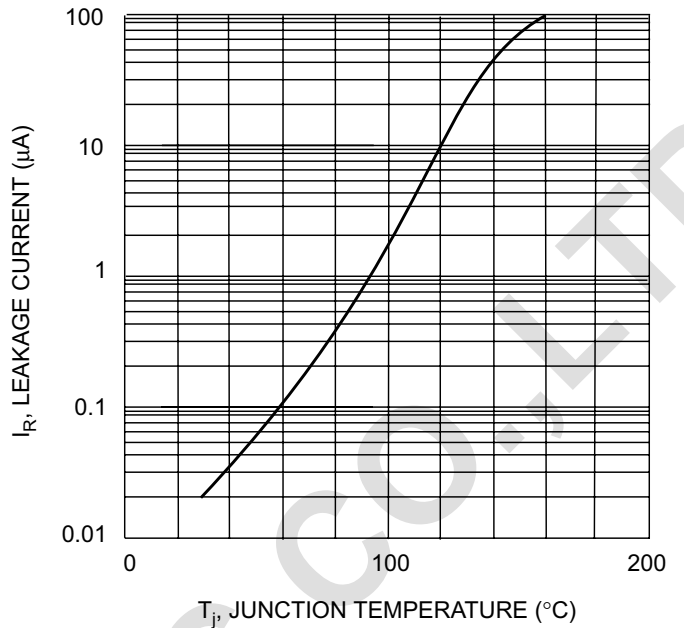
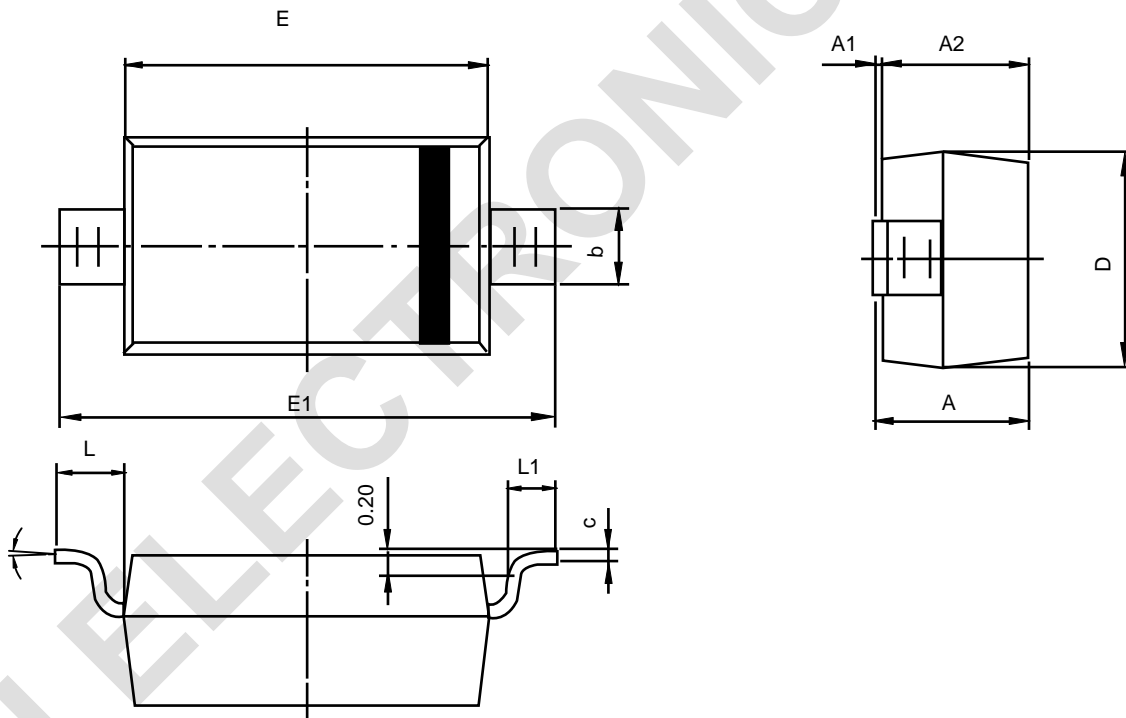


Fig. 2 Leakage Current vs Junction Temperature



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500REF		0.020REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°