



BAV19W, BAV20W, BAV21W

Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

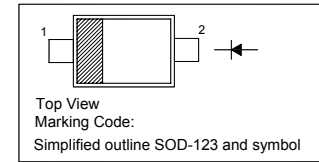
Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion

	BAV19W	BAV20W	BAV21W
MARKING	JX	T2	T3

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	BAV19W BAV20W BAV21W V_{RRM}	120 200 250	V
Reverse Voltage	BAV19W BAV20W BAV21W V_R	100 150 200	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	I_{FM}	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ ms}$ at $t = 1\text{ s}$ I_{FSM}	2.5 0.5	A
Power Dissipation	P_d	250	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	1 1.25	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	BAV19W BAV20W BAV21W $V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	BAV19W BAV20W BAV21W I_R	- - -	100 100 100	nA
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $I_{rr} = 0.1I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns

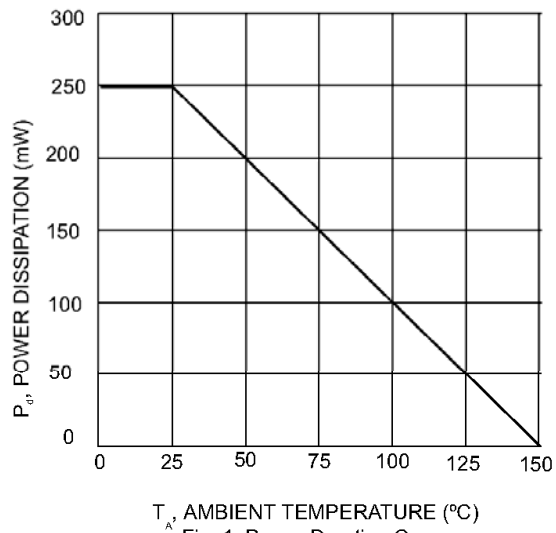


Fig. 1 Power Derating Curve

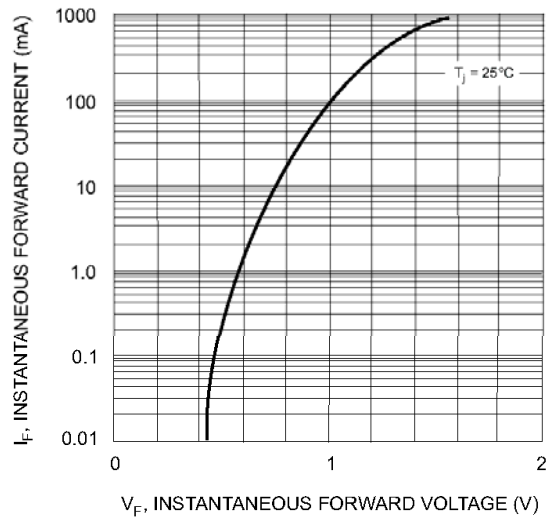


Fig. 2 Typical Forward Characteristics

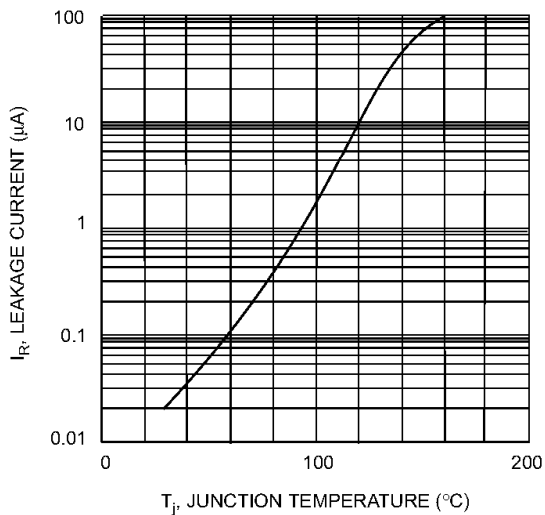
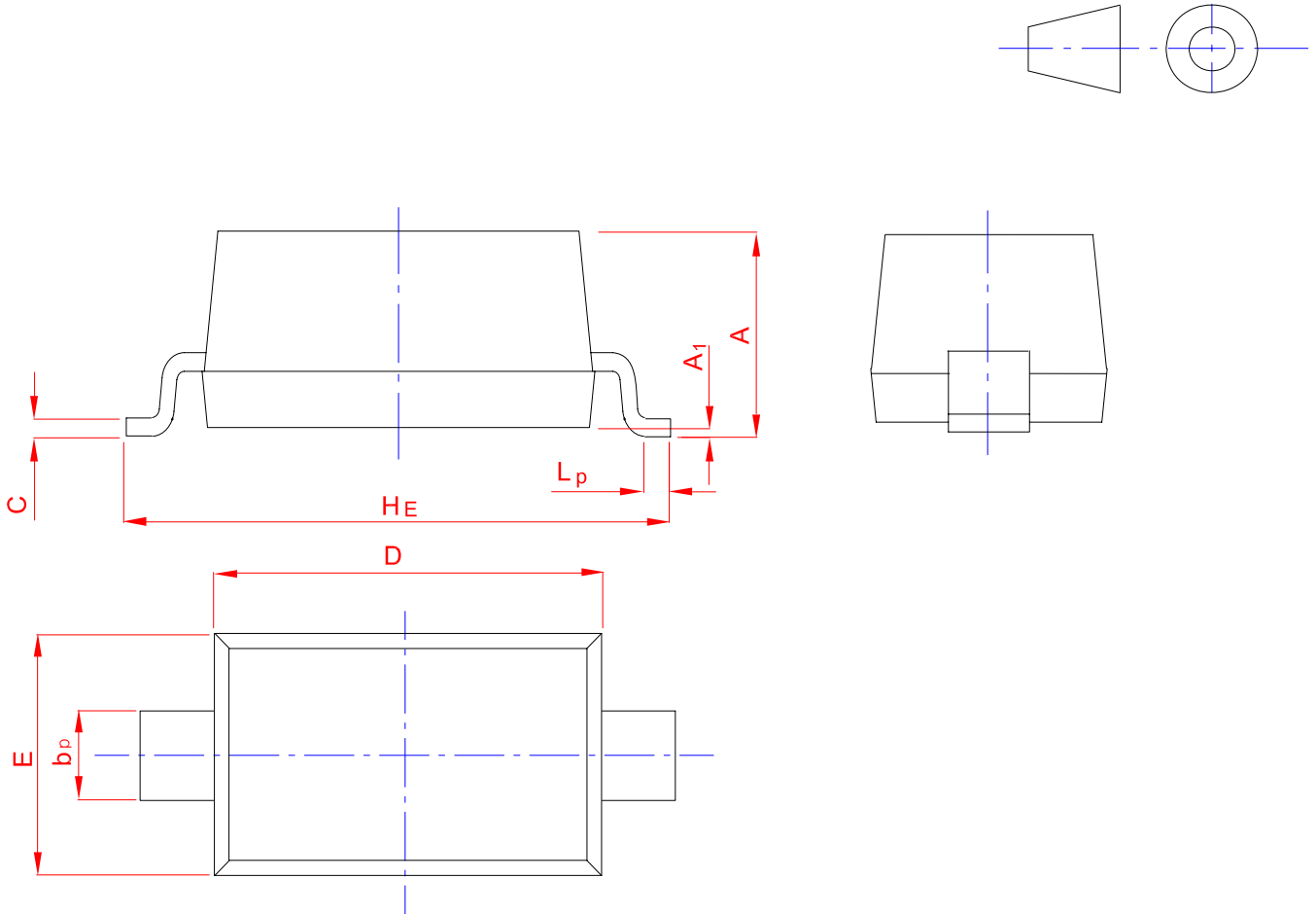


Fig. 3 Leakage Current vs. Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20