



BAV19W, BAV20W, BAV21W

Silicon Epitaxial Planar Diodes

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High Voltage Switching Diode

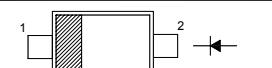
Features

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

	BAV19W	BAV20W	BAV21W
MARKING	A8	T2	T3

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code:
Simplified outline SOD-123 and symbol

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage BAV19W BAV20W BAV21W	V_{RRM}	120	V
		200	
		250	
Reverse Voltage BAV19W BAV20W BAV21W	V_R	100	V
		150	
		200	
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	A
		0.5	
Power Dissipation	P_d	250	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	°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 $I_R = 100 \mu\text{A}$ BAV19W BAV20W BAV21W	$V_{(BR)R}$	120	-	V
		200	-	
		250	-	
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
		-	100	
		-	100	
Total Capacitance at $V_R = 0, f = 1 \text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30 \text{ mA}, I_{rr} = 0.1I_R, R_L = 100 \Omega$	t_{rr}	-	50	ns

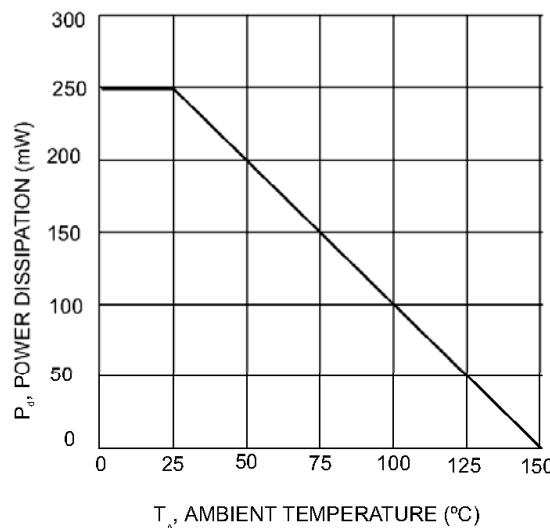


Fig. 1 Power Derating Curve

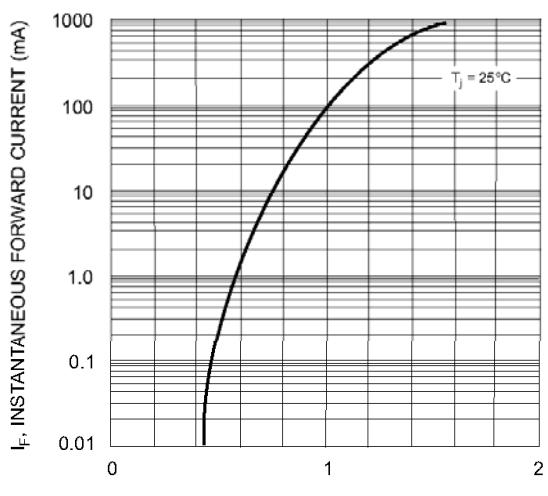


Fig. 2 Typical Forward Characteristics

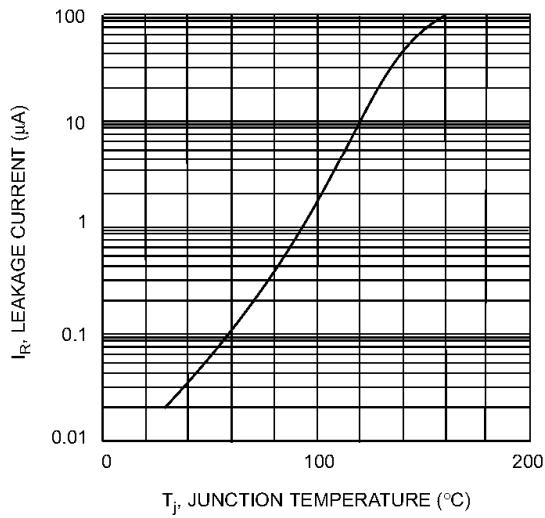


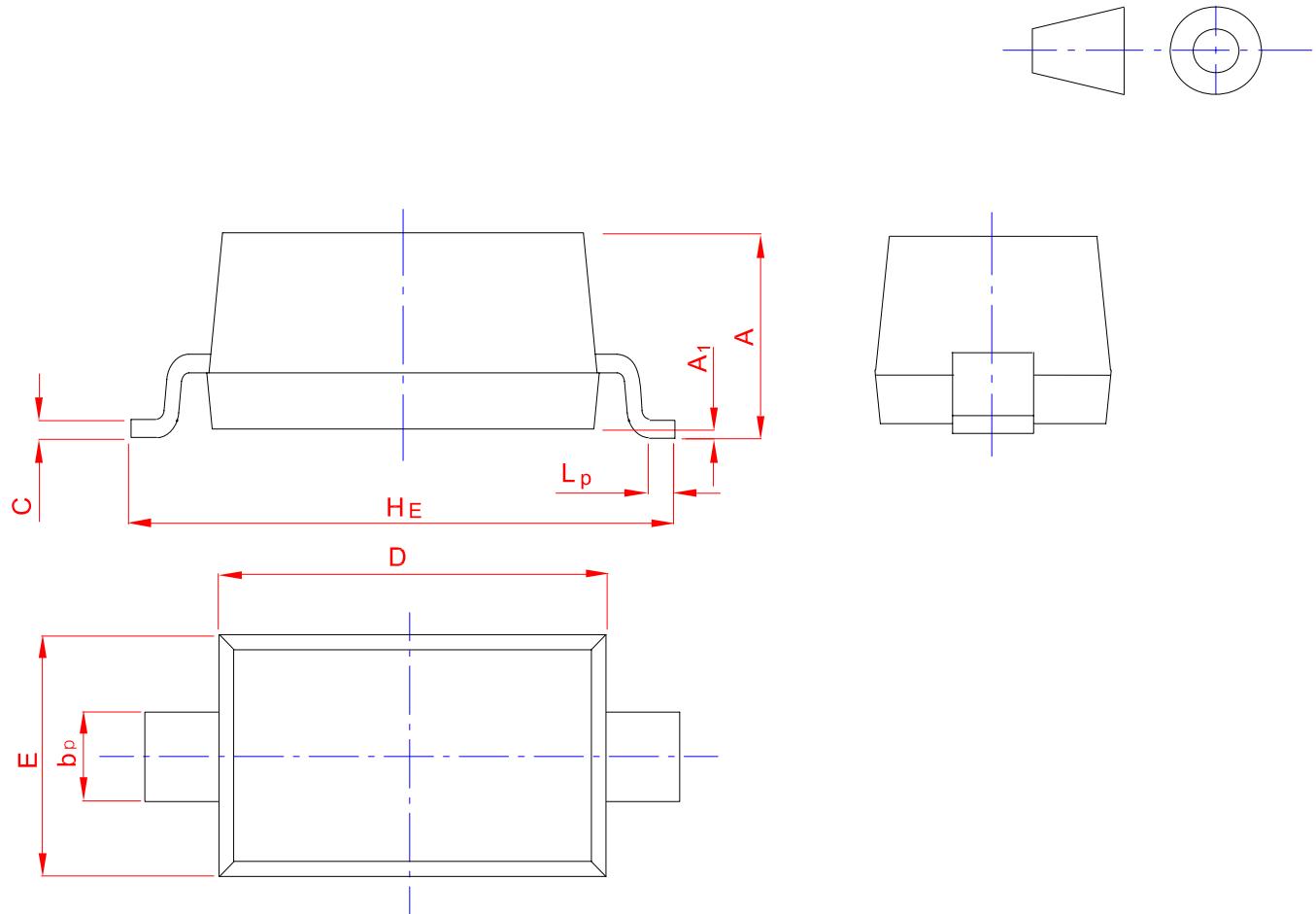
Fig. 3 Leakage Current vs Junction Temperature



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
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