



Silicon Epitaxial Planar Diodes High Voltage Switching Diode

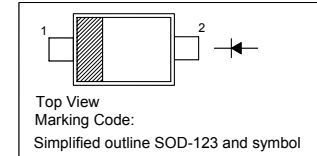
Features

- 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

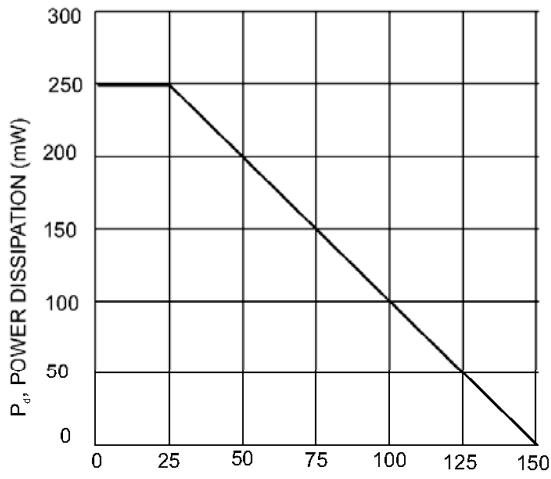


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

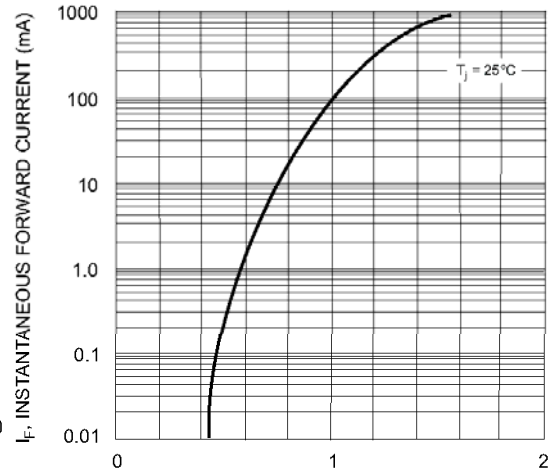
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120	V
		200	
		250	
Reverse Voltage	V_R	100	V
		150	
		200	
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	I_{FM}	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge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

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

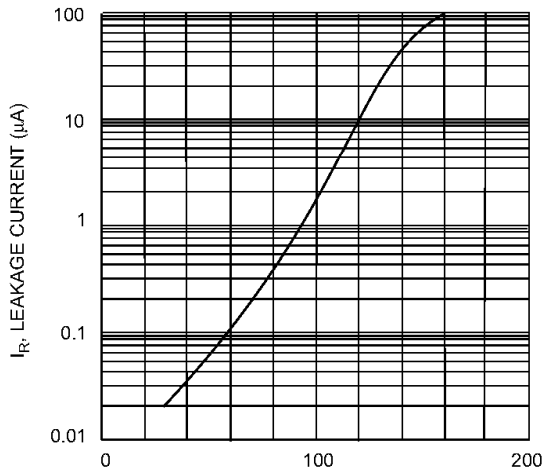
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	-	1	V
		-	1.25	
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	120	-	V
		200	-	
		250	-	
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$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



T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



T_j , JUNCTION TEMPERATURE (°C)
Fig. 3 Leakage Current vs. Junction Temperature