

## Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

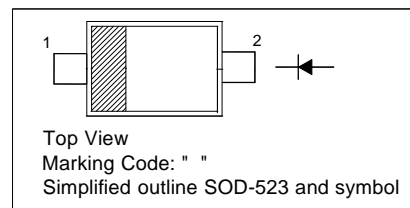
### Features

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

	BAV19WT	BAV20WT	BAV21WT
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	$V_{RRM}$	120 200 250	V
Reverse Voltage	$V_R$	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	$I_{FSM}$	2.5 0.5	A
Power Dissipation	$P_{tot}$	200	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
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	$I_R$	- - -	100 100 100	nA
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	$V_F$	- -	1 1.25	V
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	$C_T$	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{RR} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	$t_{rr}$	-	50	ns

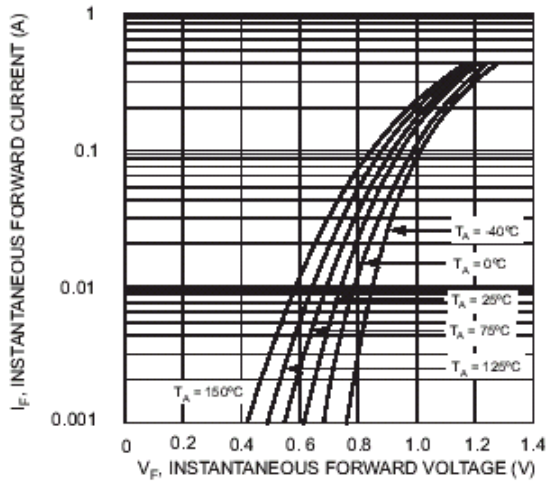


Fig. 1 Typical Forward Characteristics

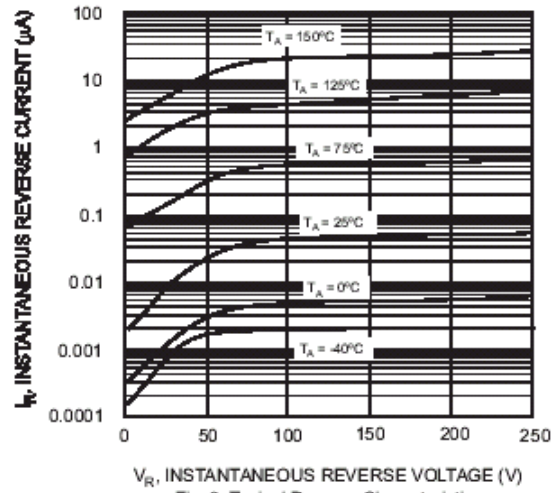


Fig. 2 Typical Reverse Characteristics

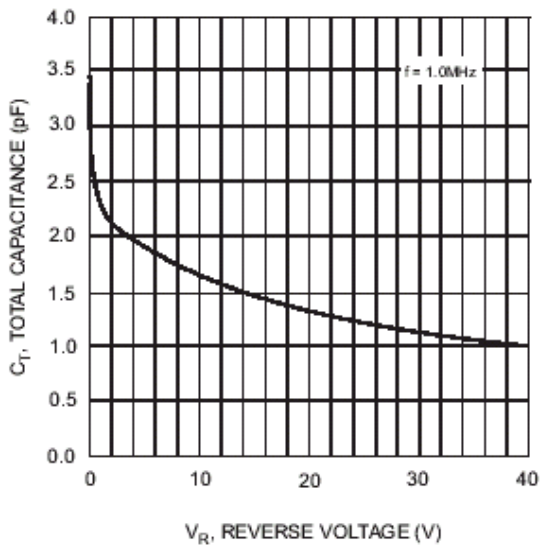


Fig. 3 Typical Capacitance vs. Reverse Voltage

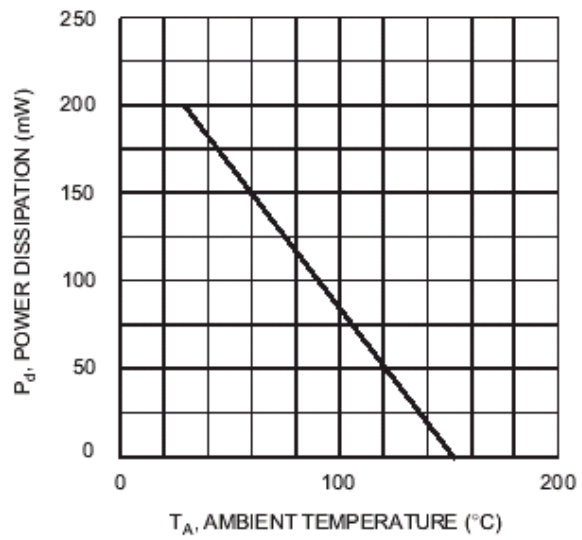


Fig. 4 Power Derating Curve, Total Package