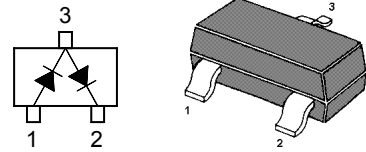


# BAV99

## Silicon Epitaxial Planar Switching Diode

Fast switching in thick and thin-film circuits diode



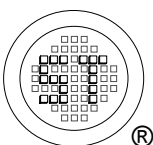
Marking Code: A7  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Continuous Reverse Voltage	$V_R$	75	V
Continuous Forward Current (Double Diode Loaded)	$I_F$	125	mA
Continuous Forward Current (Single Diode Loaded)	$I_F$	215	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	at $t = 1\text{ s}$	0.5
		at $t = 1\text{ ms}$	1
		at $t = 1\text{ }\mu\text{s}$	4.5
Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage	$V_F$	at $I_F = 1\text{ mA}$	0.715
		at $I_F = 10\text{ mA}$	0.855
		at $I_F = 50\text{ mA}$	1
		at $I_F = 150\text{ mA}$	1.25
Reverse Current	$I_R$	at $V_R = 25\text{ V}$	30
		at $V_R = 75\text{ V}$	1
		at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$	30
		at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	50
Diode Capacitance	$C_d$	1.5	pF
Reverse Recovery Time	$t_{rr}$	4	ns
at $I_F = I_R = 10\text{ mA}, I_R = 1\text{ mA}, R_L = 100\text{ }\Omega$			



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Dated : 15/06/2009

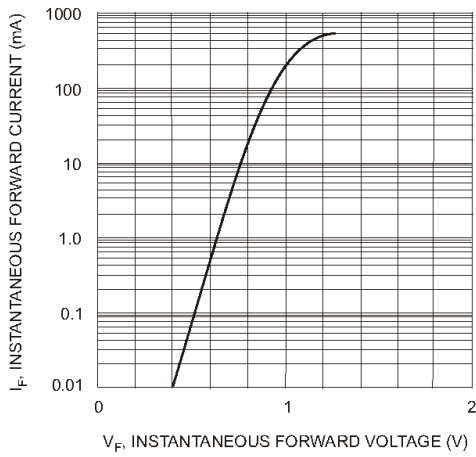


Fig. 1 Forward Characteristics

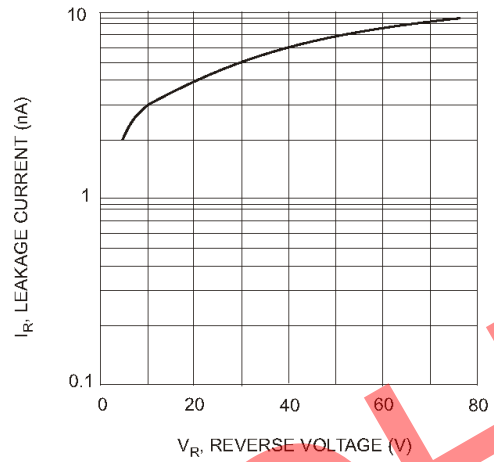


Fig. 2 Typical Leakage Current vs Reverse Voltage

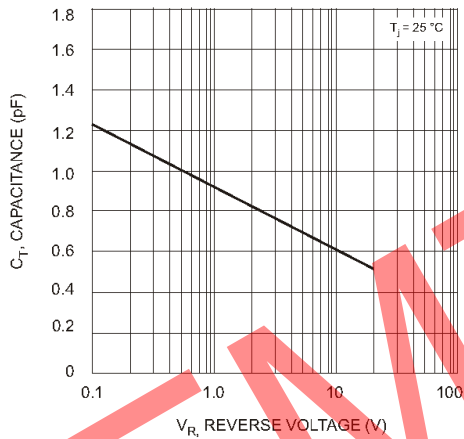
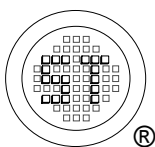


Fig. 3 Typical Total Capacitance vs Reverse Voltage



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