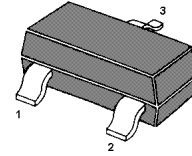
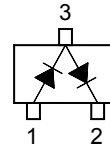


# BAV99

## Silicon Epitaxial Planar Switching Diode

Fast switching in thick and thin-film circuits diode



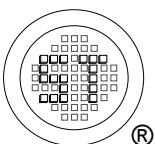
Marking Code: A7  
TO-236 Plastic Package

### 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	A
		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 at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	$V_F$	0.715 0.855 1 1.25	V			
Reverse Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$		$I_R$		30 1 30 50	nA $\mu\text{A}$ $\mu\text{A}$ $\mu\text{A}$	
Diode Capacitance at $V_R = 0, f = 1\text{ MHz}$				$C_d$	1.5	pF
Reverse Recovery Time at $I_F = 10\text{ mA}, V_R = 6\text{ V}, I_{RR} = 1\text{ mA}, R_L = 100\text{ }\Omega$				$t_{rr}$	4	ns



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Certificate No. PRC-1874-148-1

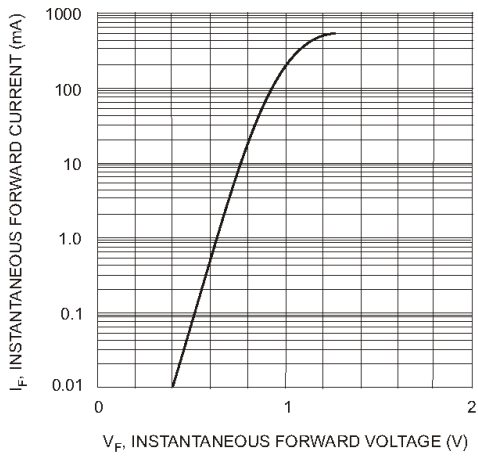


Fig. 1 Forward Characteristics

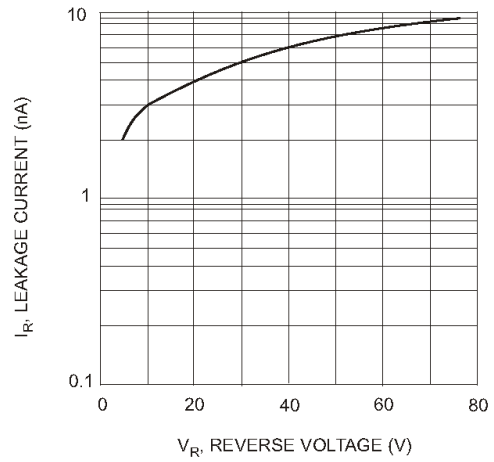


Fig. 2 Typical Leakage Current vs Reverse Voltage

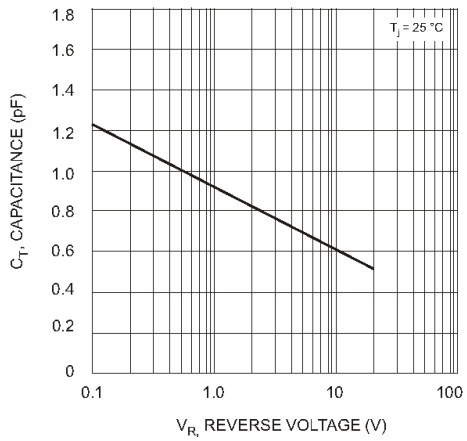
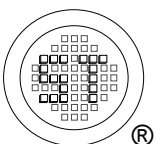


Fig. 3 Typical Total Capacitance vs Reverse Voltage



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