



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

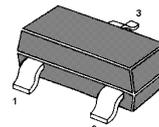
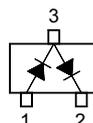
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

### BAV99

#### Silicon Epitaxial Planar Switching Diode

Fast switching in thick and thin-film circuits diode



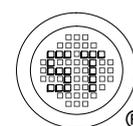
Marking Code: A7  
SOT-23 Plastic Package

#### Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	85	V
Continuous Reverse Voltage	V <sub>R</sub>	75	V
Continuous Forward Current (Double Diode Loaded)	I <sub>F</sub>	125	mA
Continuous Forward Current (Single Diode Loaded)	I <sub>F</sub>	215	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	450	mA
Non-repetitive Peak Forward Surge Current	I <sub>FSM</sub>	at t = 1 s	0.5
		at t = 1 ms	1
		at t = 1 μs	4.5
Power Dissipation	P <sub>tot</sub>	350	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to + 150	°C

#### Characteristics at T<sub>a</sub> = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I <sub>F</sub> = 1 mA at I <sub>F</sub> = 10 mA at I <sub>F</sub> = 50 mA at I <sub>F</sub> = 150 mA	V <sub>F</sub>	0.715 0.855 1 1.25	V
Reverse Current at V <sub>R</sub> = 25 V at V <sub>R</sub> = 75 V at V <sub>R</sub> = 25 V, T <sub>j</sub> = 150 °C at V <sub>R</sub> = 75 V, T <sub>j</sub> = 150 °C	I <sub>R</sub>	30 1 30 50	nA μA μA μA
Diode Capacitance at V <sub>R</sub> = 0, f = 1 MHz	C <sub>d</sub>	1.5	pF
Reverse Recovery Time at I <sub>F</sub> = I <sub>R</sub> = 10 mA, I <sub>R</sub> = 1 mA, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	4	ns



Dated : 15/06/2009



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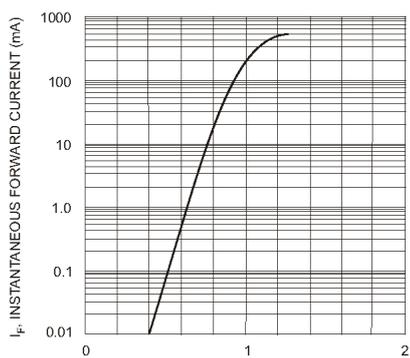


Fig. 1 Forward Characteristics

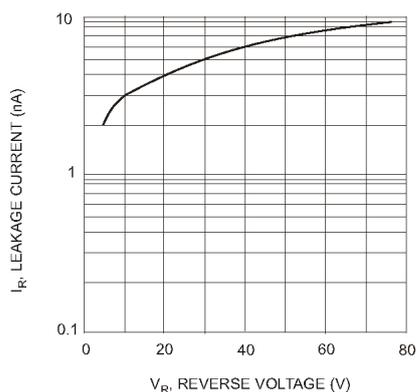


Fig. 2 Typical Leakage Current vs Reverse Voltage

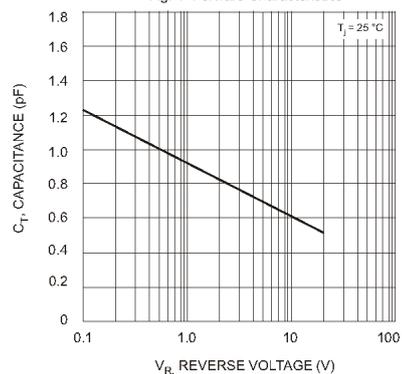
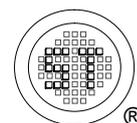


Fig. 3 Typical Total Capacitance vs Reverse Voltage



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