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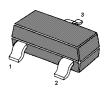
### **BAV74**

# Silicon Epitaxial Planar Switching Diode

#### **Applications**

Ultra high speed switching application





Marking Code: **A4** SOT-23 Plastic Package

# Absolute Maximum Ratings ( $T_a = 25$ °C)

Parameter		Symbol	Value	Unit
Peak Repetitive Reverse Voltage		$V_{RRM}$	60	V
Continuous Reverse Voltage		$V_R$	50	V
	gle Diode Loaded uble Diode Loaded	I <sub>FSM</sub>	215 125	mA
Repetitive Peak Forward Current		I <sub>FRM</sub>	450	mA
Non-repetitive Peak Forward Surge Curre	nt at t = 1 s at t = 1 ms at t = 1 µs	I <sub>FSM</sub>	0.5 1 4	А
Power Dissipation	•	$P_d$	350	mW
Operating Junction Temperature Range		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	- 55 to + 150	°C

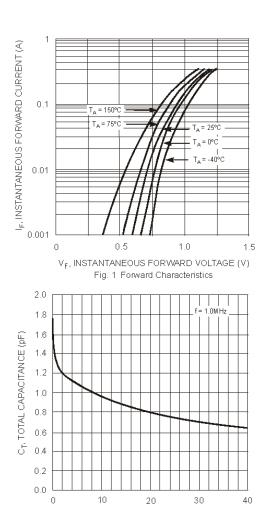
### Characteristics at T<sub>a</sub> = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage			
at I <sub>F</sub> = 1 mA	$V_{F}$	715	mV
at I <sub>F</sub> = 10 mA	$V_{F}$	855	mV
at $I_F = 50 \text{ mA}$	$V_{F}$	1	V
at I <sub>F</sub> = 150 mA	$V_{F}$	1.25	V
Reverse Current			
at V <sub>R</sub> = 25 V	I <sub>R</sub>	30	nA
at V <sub>R</sub> = 50 V	I <sub>R</sub>	0.1	μA
at V <sub>R</sub> = 25 V, T <sub>J</sub> = 150 °C	I <sub>R</sub>	30	μA
at V <sub>R</sub> = 50 V, T <sub>J</sub> = 150 °C	I <sub>R</sub>	100	μA
Diode Capacitance	C <sub>d</sub>	2	pF
at $V_R = 0$ , $f = 1 MHz$	Od	2	ρι
Reverse Recovery Time	t <sub>rr</sub>	4	ns
at $I_F = I_R = 10$ mA to $I_R = 1$ mA, $R_L = 100 \Omega$	۲rr	7	113



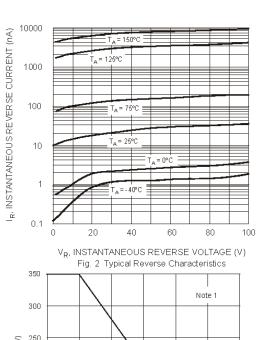
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V<sub>R</sub>, REVERSE VOLTAGE (V)

Fig. 3 Typical Capacitance vs. Reverse Voltage



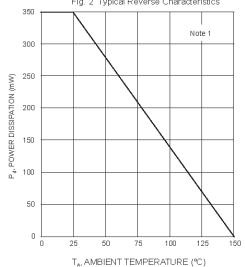


Fig. 4 Power Derating Curve