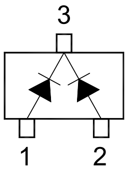
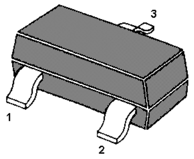
BAV74

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
Forward Current (DC)	Single Diode Loaded Double Diode Loaded	I_{FSM}	215 125	mA
Repetitive Peak Forward Current		I_{FRM}	450	mA
Non-repetitive Peak Forward Surge Current	at t = 1 s at t = 1 ms at t = 1 µs	I_{FSM}	0.5 1 4	A
Power Dissipation		P_d	350	mW
Operating Junction Temperature Range		T_j	150	°C
Storage Temperature Range		T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage			
at I_F = 1 mA	V_F	715	mV
at I_F = 10 mA	V_F	855	mV
at I_F = 50 mA	V_F	1	V
at I_F = 150 mA	V_F	1.25	V
Reverse Current			
at V_R = 25 V	I_R	30	nA
at V_R = 50 V	I_R	0.1	µA
at V_R = 25 V, T_J = 150 °C	I_R	30	µA
at V_R = 50 V, T_J = 150 °C	I_R	100	µA
Diode Capacitance at V_R = 0 , f = 1 MHz	C_d	2	pF
Reverse Recovery Time at I_F = I_R = 10 mA to I_R = 1 mA, R_L = 100 Ω	t_{rr}	4	ns

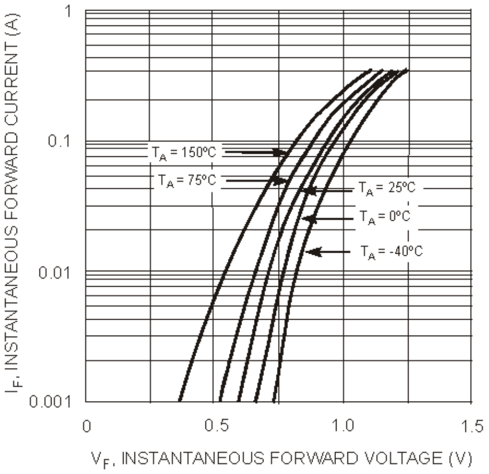


Fig. 1 Forward Characteristics

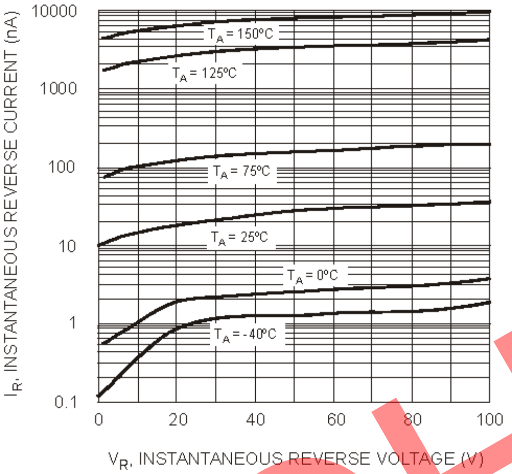


Fig. 2 Typical Reverse Characteristics

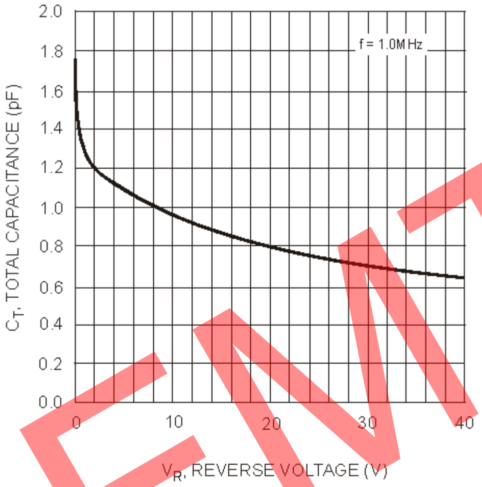


Fig. 3 Typical Capacitance vs. Reverse Voltage

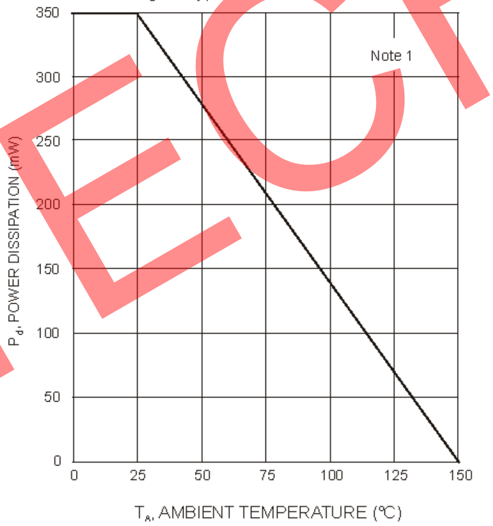


Fig. 4 Power Derating Curve