Silicon Epitaxial Planar Switching Diode

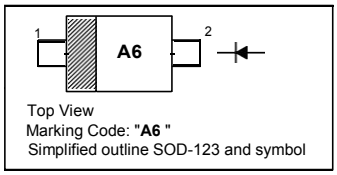
Features

• Fast switching diode

MARKING:A6

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**A6** "
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Forward Current (Continuous)	I_F	250	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 ms at t = 1 µs	I_{FSM}	0.5 1 2	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 1 mA at I_F = 10 mA at I_F = 50 mA at I_F = 150 mA	V_F	 0.715 0.855 1 1.25	V
Reverse Leakage Current at V_R = 75 V at V_R = 25 V, T_J = 150 °C at V_R = 75 V, T_J = 150 °C	I_R	 1 30 50	µA
Diode Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	2	pF
Reverse Recovery Time at I_F = 10 mA to I_R = 10 mA, I_R = 1 mA, R_L = 100 Ω	t_{rr}	6	ns

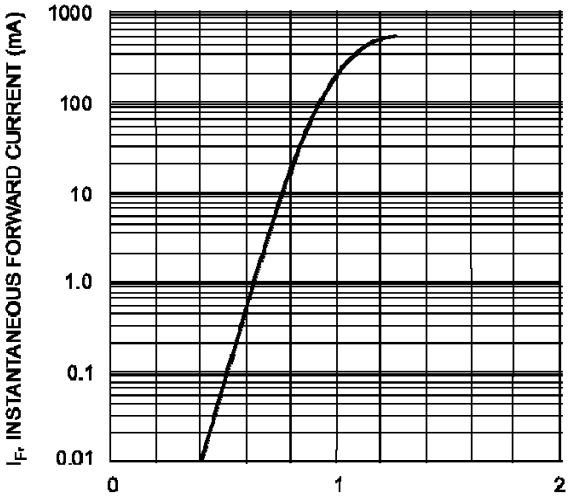


Fig. 1 Forward Characteristics

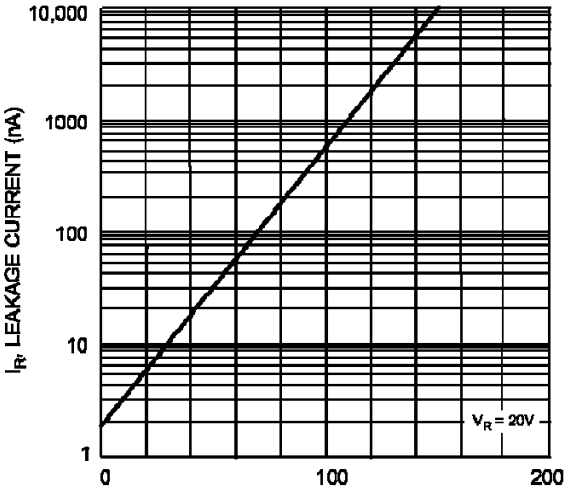


Fig. 2 Leakage Current vs Junction Temperature