

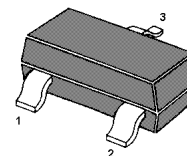
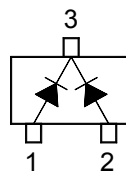
Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Applications

- Ultra high speed switching application



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

Absolute Maximum Ratings ($T_a = 25\text{ °C}$)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Forward Current	I_O	200	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1	A
		2	
Power Dissipation	P_d	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at $T_a = 25\text{ °C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage	V_F	-	715	mV
at $I_F = 1\text{ mA}$			855	mV
at $I_F = 10\text{ mA}$			1	V
at $I_F = 150\text{ mA}$			1.25	V
Reverse Current	I_R	-	25	nA
at $V_R = 20\text{ V}$			2.5	μA
at $V_R = 75\text{ V}$			30	μA
at $V_R = 25\text{ V}, T_J = 150\text{ °C}$			50	μA
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V
at $I_R = 100\text{ μA}$				
Total Capacitance	C_T	-	2	pF
Reverse Recovery Time	t_{rr}	-	4	ns
at $I_F = I_R = 10\text{ mA}$ to $I_{rr} = 1\text{ mA}, R_L = 50\text{ Ω}$				

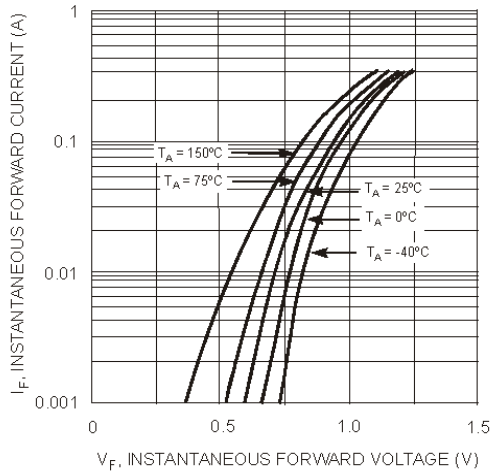


Fig. 1 Forward Characteristics

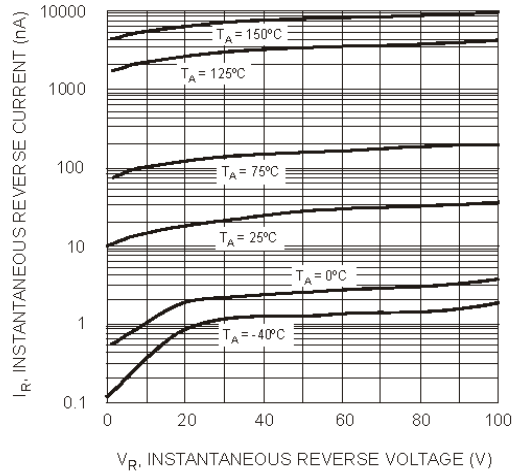


Fig. 2 Typical Reverse Characteristics

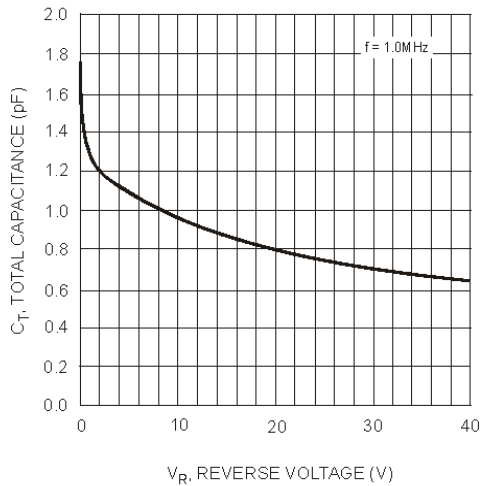


Fig. 3 Typical Capacitance vs. Reverse Voltage

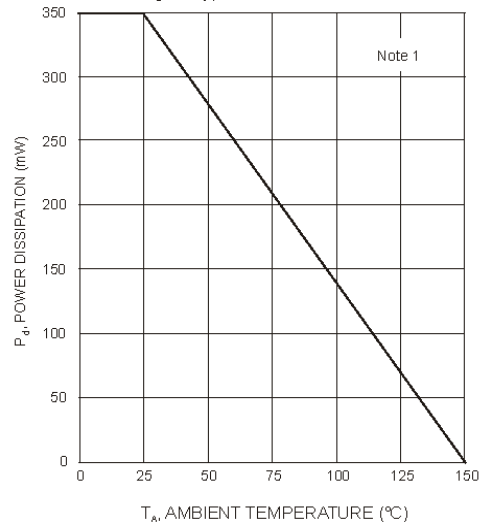


Fig. 4 Power Derating Curve