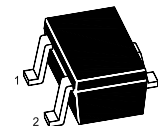
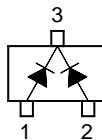


Silicon Epitaxial Planar Switching Diode

Features

- Fast switching diode
- Ultra small surface mount package



SOT-323 Plastic Package

Marking Code: **A4**

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

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Continuous Forward Current Single diode loaded Double diode loaded	I_F	175 100	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	I_{FSM}	0.5 1 4	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{BR(R)}$	75	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	0.715 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}, T_J = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_J = 150\text{ }^\circ\text{C}$	I_R	- - - -	30 2.5 60 100	nA μA μA μA
Diode Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_{tot}	-	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}, I_{rr} = 0.1 I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

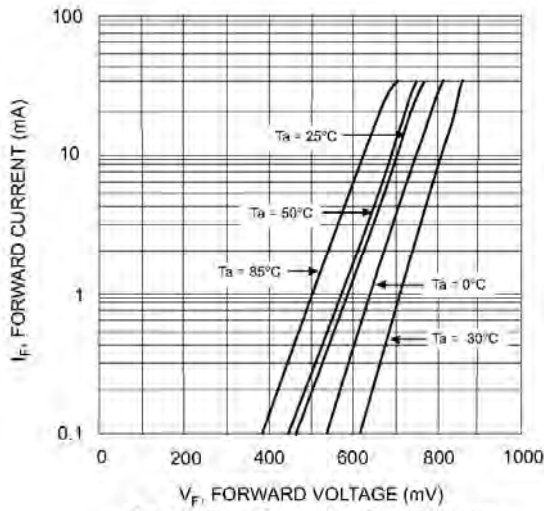


Fig. 1 Forward Current vs. Forward Voltage

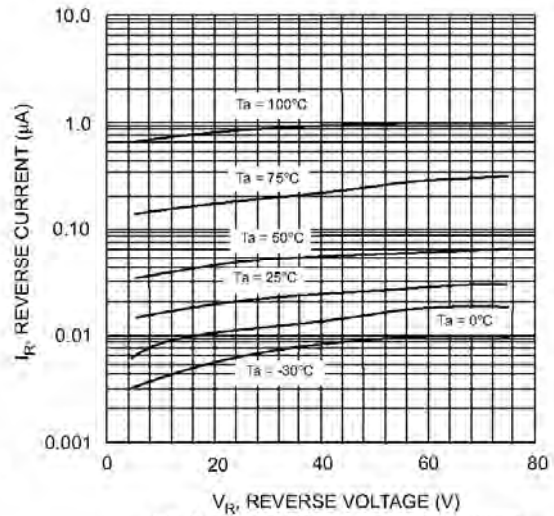


Fig. 2 Reverse Current vs. Reverse Voltage

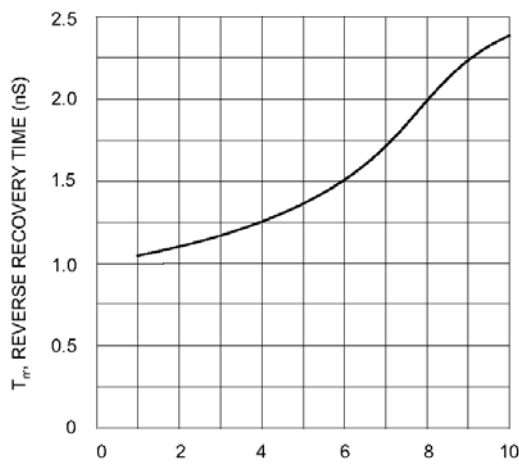


Fig. 3. Reverse Recovery Time vs. Forward Current

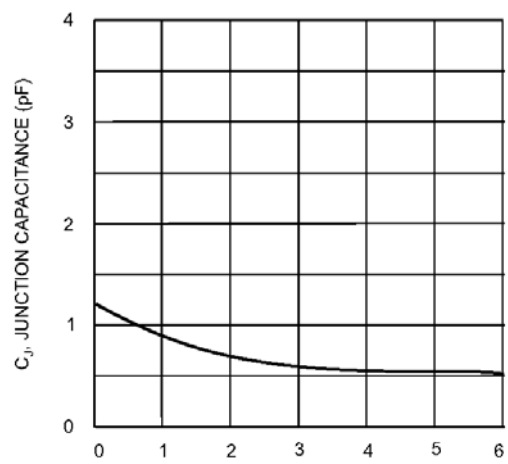
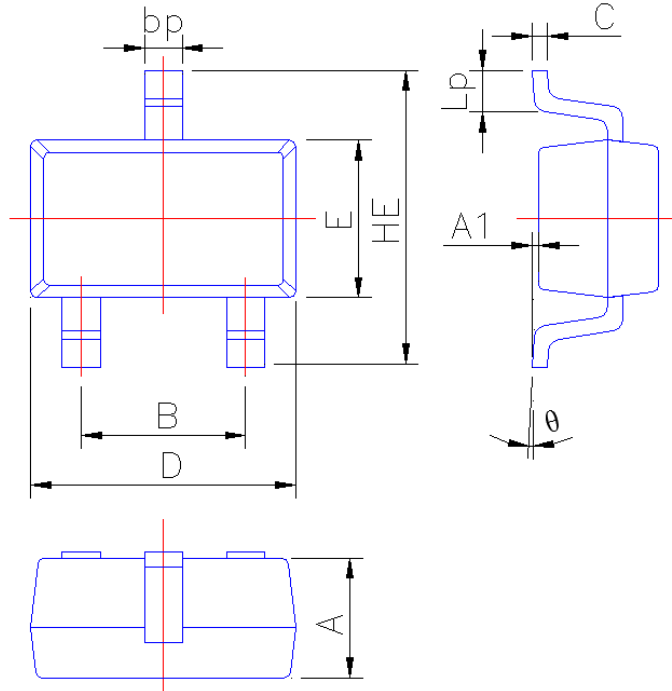


Fig. 4. Typical Junction Capacitance vs. Reverse Voltage

SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.00
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.45
C	0.09	0.15
D	2.00	2.20
E	1.15	1.35
HE	2.15	2.55
Lp	0.25	0.46
θ	0°	6°