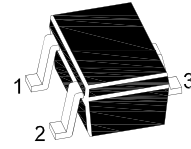
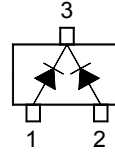


Silicon Epitaxial Planar Switching Diode

Application

- Ultra high speed switching



SOT-523 Plastic Package
Marking Code: **N9**

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

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	80	V
Reverse Voltage	V_R	80	V
Average Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-repetitive Peak Forward Surge Current ($t = 1\text{ }\mu\text{s}$)	I_{FSM}	2	A
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	-	1.2	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	80	-	V
Reverse Current at $V_R = 70\text{ V}$	I_R	-	0.1	μA
Total Capacitance at $V_R = 6\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	3.5	pF
Reverse Recovery Time at $V_R = 6\text{ V}$, $I_F = 5\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

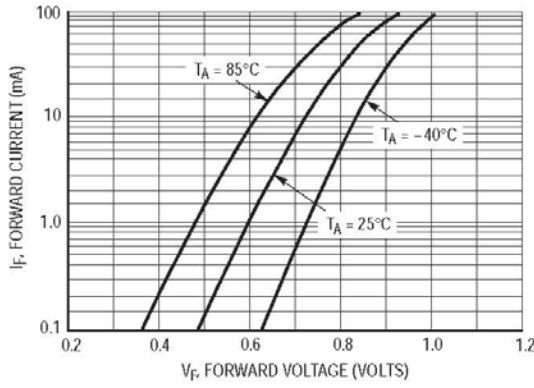


Figure 1. Forward Voltage

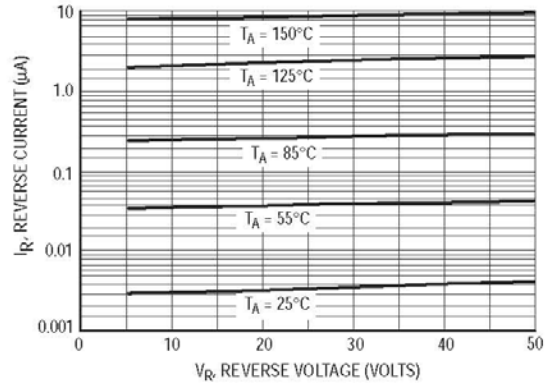


Figure 2. Reverse Current

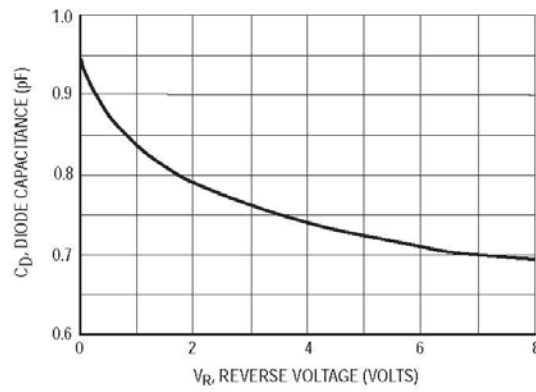
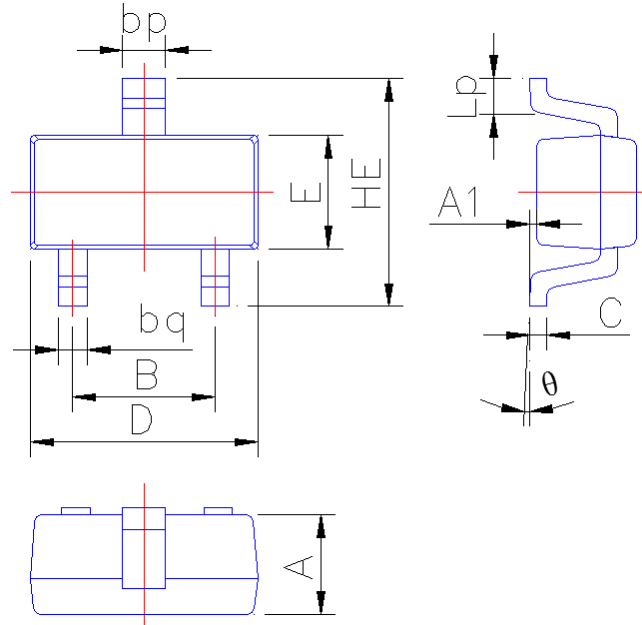


Figure 3. Diode Capacitance



SOT-523 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.80
A1	0.010	0.100
B	0.95	1.05
bp	0.26	0.40
bq	0.16	0.30
C	0.09	0.15
D	1.50	1.70
E	0.70	0.85
HE	1.45	1.75
Lp	0.16	0.36
θ	0°	5°