CHINA BASE
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SOT-23

1SS321

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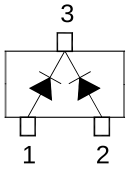
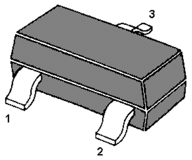
Silicon Epitaxial Schottky Barrier Diode

For low voltage switching application

Features

- Low forward voltage
- Low reverse current





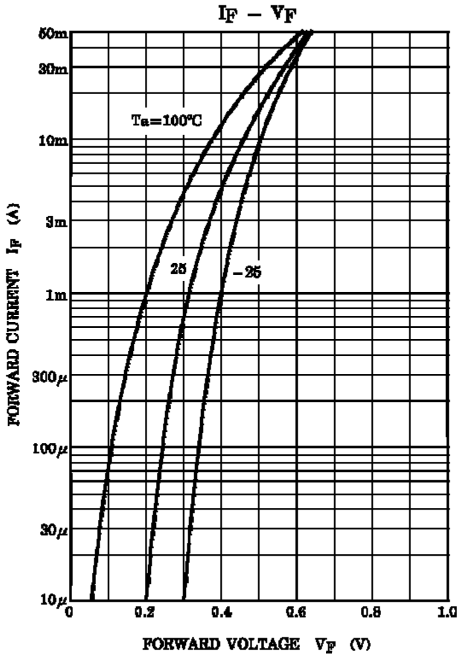
Marking Code: "**ZC**"
SOT-23 Plastic Package

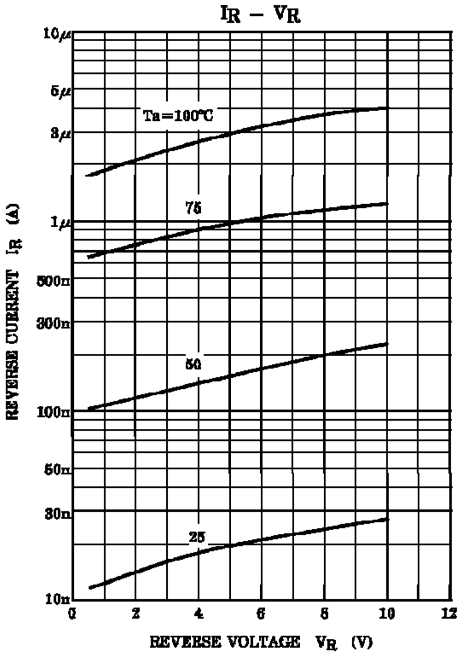
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	12	V
Reverse Voltage	V_R	10	V
Average Forward Current	$I_{F(AV)}$	50	mA
Maximum Peak Forward Current	I_{FM}	150	mA
Non-Repetitive Peak Forward Surge Current (t = 10 ms)	I_{FSM}	1	A
Power Dissipation	P_d	150	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

Characteristics at T_a = 25 °C

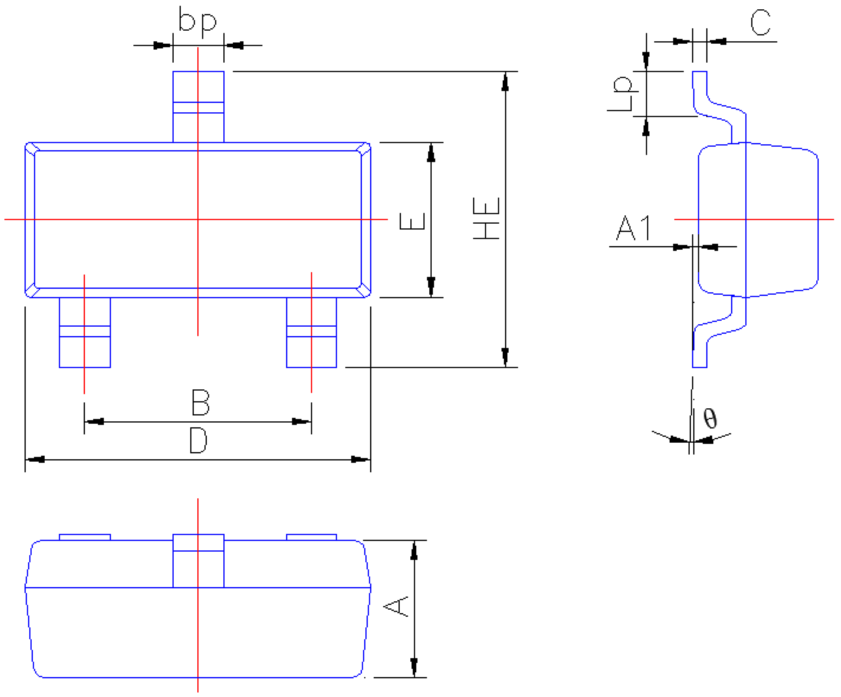
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 50 mA	V_F	-	1	V
Reverse Current at V_R = 10 V	I_R	-	500	nA
Reverse Breakdown Voltage at I_R = 10 µA	$V_{(BR)R}$	12	-	V
Total Capacitance at V_R = 1 V, f = 1 MHz	C_T	-	20	pF


$I_F - V_F$
50m
30m
10m
3m
1m
300μ
100μ
30μ
10μ
0
0.2
0.4
0.6
0.8
1.0
Ta=100°C
25
−25
FORWARD CURRENT I_F (A)
FORWARD VOLTAGE V_F (V)


$I_R - V_R$
10μ
5μ
3μ
1μ
500n
300n
100n
50n
30n
10n
0
2
4
6
8
10
12
Ta=100°C
75
50
25
REVERSE CURRENT I_R (A)
REVERSE VOLTAGE V_R (V)

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°