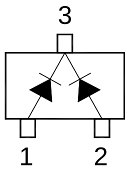
# 1SS321

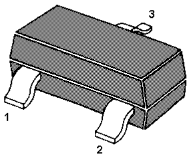
## Silicon Epitaxial Schottky Barrier Diode

For low voltage switching application

**Features**

- Low forward voltage
- Low reverse current





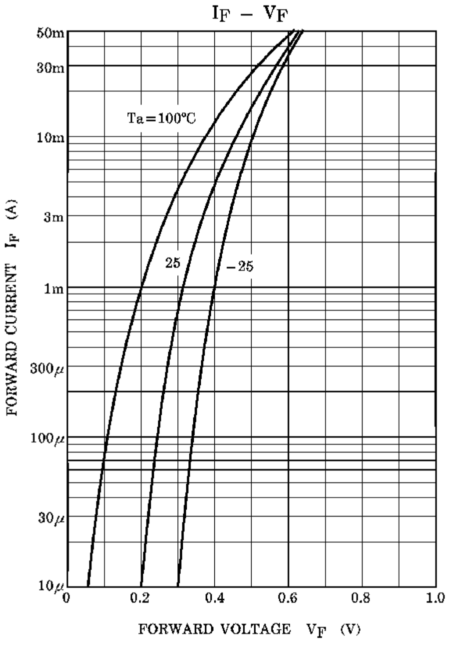
Marking Code: "ZC"
TO-236 Plastic Package

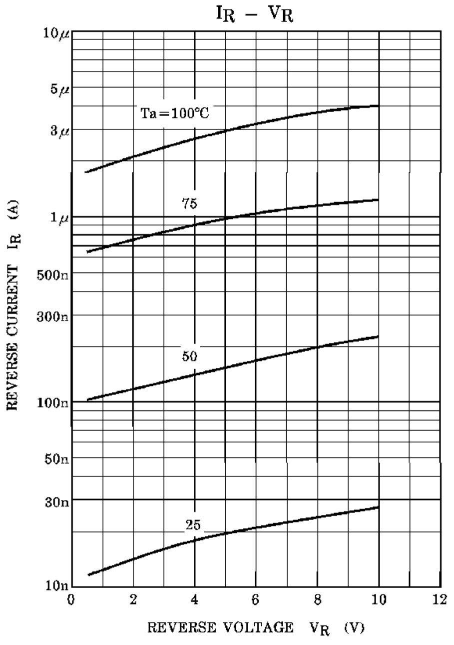
### Absolute Maximum Ratings ($T_a$ = 25 °C)

| 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<br>at $I_F$ = 50 mA | $V_F$ | - | 1 | V |
| Reverse Current<br>at $V_R$ = 10 V | $I_R$ | - | 500 | nA |
| Reverse Breakdown Voltage<br>at $I_R$ = 10 µA | $V_{(BR)R}$ | 12 | - | V |
| Total Capacitance<br>at $V_R$ = 1 V, f = 1 MHz | $C_T$ | - | 20 | pF |


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


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