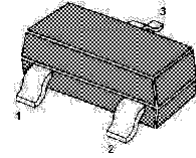
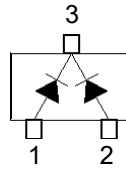


1SS321 Silicon Epitaxial Schottky Barrier Diode

For low voltage switching application

Features

- Low forward voltage
- Low reverse current



Marking Code: "ZC"
SOT-23 Plastic Package

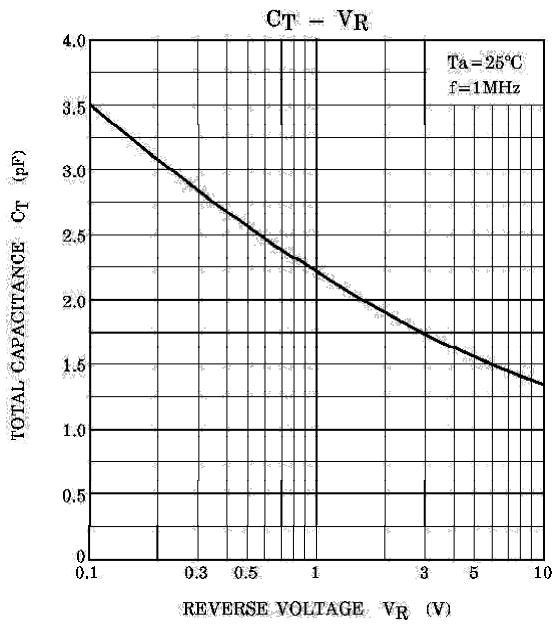
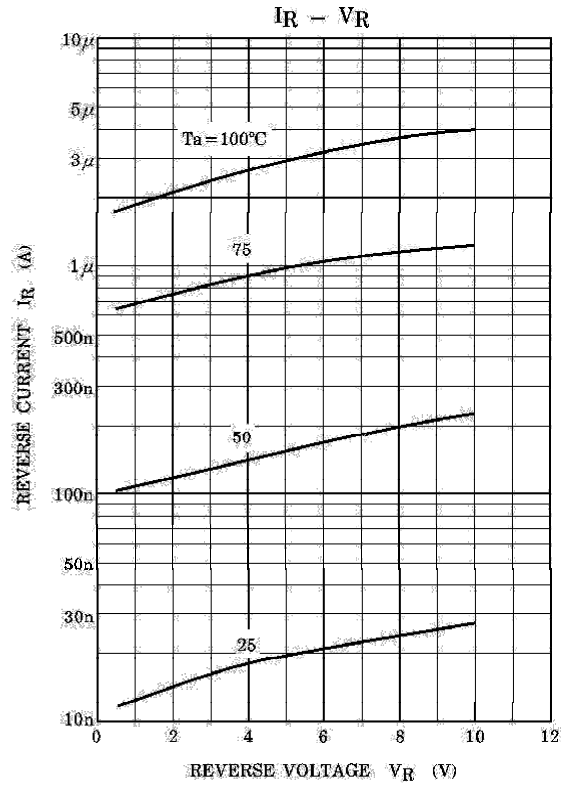
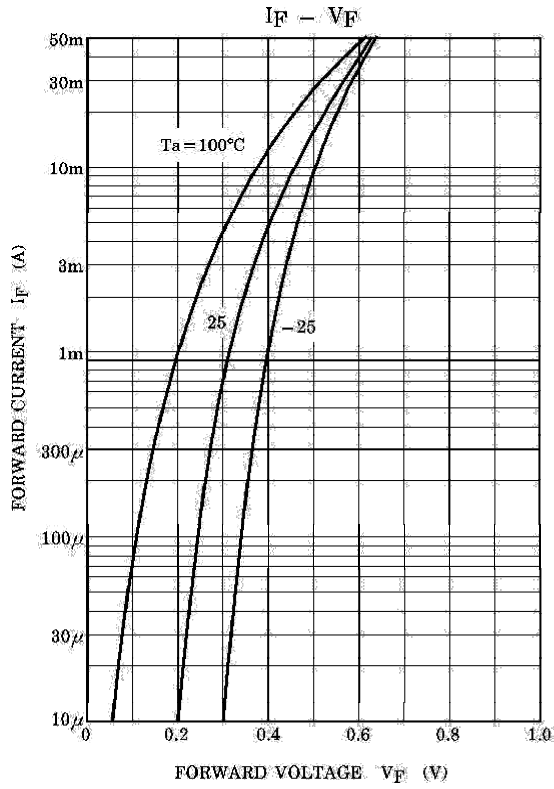
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

| 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 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 125 | $^\circ\text{C}$ |

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

| 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 |

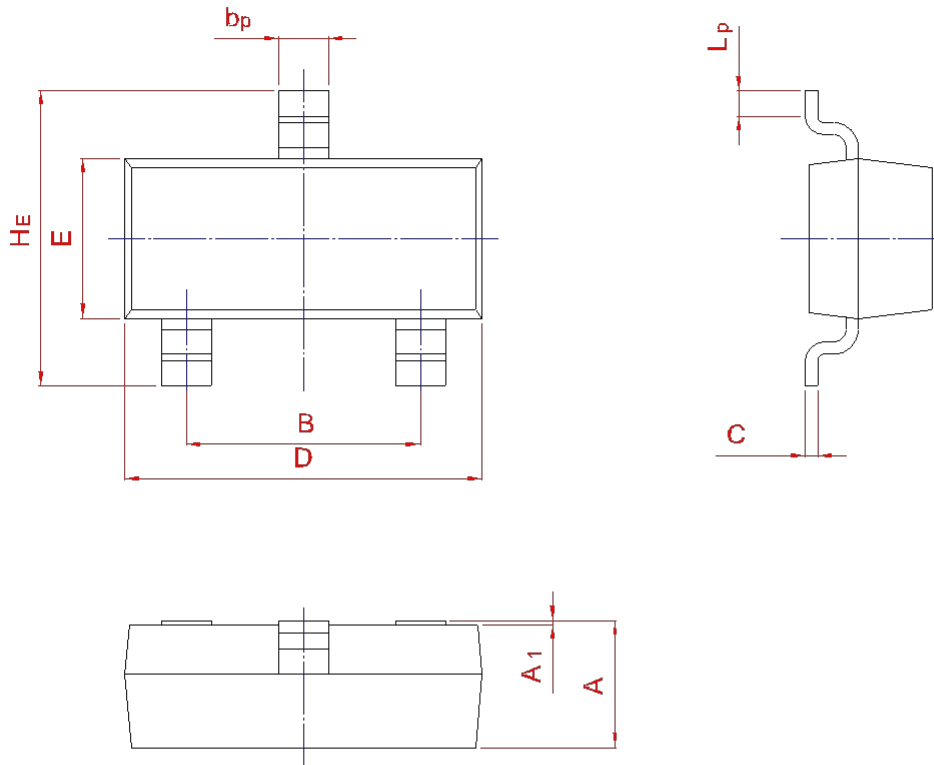
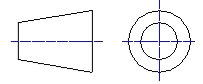
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



| UNIT | A | B | b_p | C | D | E | H_E | A_1 | L_p |
|------|------|------|-------|------|------|------|-------|-------|-------|
| mm | 1.40 | 2.04 | 0.50 | 0.19 | 3.10 | 1.65 | 3.00 | 0.100 | 0.50 |
| | 0.95 | 1.78 | 0.35 | 0.08 | 2.70 | 1.20 | 2.20 | 0.013 | 0.20 |