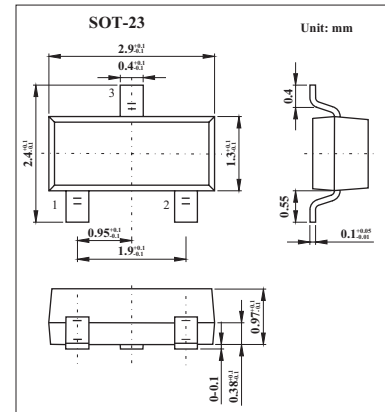


## SILICON SWITCHING DIODE

## 1SS221

## ■ Features

- Low capacitance:  $C_t = 4.0$  pF MAX.
- High speed switching:  $t_{rr} = 3.0$  ns MAX.
- Wide applications including switching, limiter clipper.

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

| Parameter                 | Symbol        | Rating    | Unit                       |
|---------------------------|---------------|-----------|----------------------------|
| Peak Reverse Voltage      | $V_{RM}$      | 100       | V                          |
| DC Reverse Voltage        | $V_R$         | 100       | V                          |
| Peak Forward Current      | $I_{FM}$      | 300       | mA                         |
| Average Rectified Current | $I_o$         | 100       | mA                         |
| DC Forward Current        | $P$           | 100       | mW                         |
| Junction Temperature      | $T_j$         | 150       | $^\circ\text{C}$           |
| Storage Temperature Range | $T_{stg}$     | -55 + 150 | $^\circ\text{C}$           |
| Junction to Ambient       | $R_{th(j-a)}$ | 0.67      | $^\circ\text{C}/\text{mW}$ |

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

| Parameter                  | Symbol   | Test Conditions                                  | Min | Typ | Max  | Unit          |
|----------------------------|----------|--|-----|-----|------|---------------|
| Continuous reverse voltage | $V_F$    | $I_F = 10$ Ma                                    |     | 720 | 850  | mV            |
|                            |          | $I_F = 50$ mA                                    |     | 850 | 1000 |               |
|                            |          | $I_F = 100$ mA                                   |     | 950 | 1200 |               |
| Reverse current            | $I_R$    | $V_R = 100$ V                                    |     |     | 1.0  | $\mu\text{A}$ |
| capacitance                | $C_t$    | $V_R = 0, f = 1.0$ MHz                           |     | 2.0 | 4.0  | pF            |
| Reverse recovery time      | $t_{rr}$ | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ $\Omega$ |     |     | 3.0  | ns            |

## ■ Marking

|         |     |
|---------|-----|
| Marking | A14 |
|---------|-----|