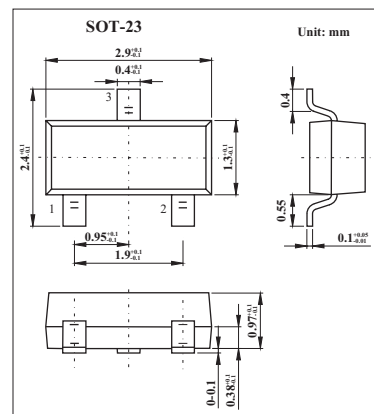


## SILICON SWITCHING DIODE

## 1SS220

## ■ Features

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

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

| Parameter                 | Symbol        | Rating    | Unit                |
|---------------------------|---------------|-----------|---------------------|
| Peak Reverse Voltage      | $V_{RM}$      | 70        | V                   |
| DC Reverse Voltage        | $V_R$         | 70        | 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      | $^\circ\text{C/mW}$ |

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

| Parameter                  | Symbol   | Test Conditions                                            | Min | Typ | Max  | Unit          |
|----------------------------|----------|------------------------------------------------------------|-----|-----|------|---------------|
| Continuous reverse voltage | $V_F$    | $I_F = 10 \text{ mA}$                                      |     | 720 | 850  | mV            |
|                            |          | $I_F = 50 \text{ mA}$                                      |     | 850 | 1000 |               |
|                            |          | $I_F = 100 \text{ mA}$                                     |     | 950 | 1200 |               |
| Reverse current            | $I_R$    | $V_R = 70 \text{ V}$                                       |     |     | 1.0  | $\mu\text{A}$ |
| capacitance                | $C_t$    | $V_R = 0, f = 1.0 \text{ MHz}$                             |     | 2.0 | 4.0  | pF            |
| Reverse recovery time      | $t_{rr}$ | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 100 \Omega$ |     |     | 3.0  | ns            |

## ■ Marking

|         |     |
|---------|-----|
| Marking | A13 |
|---------|-----|