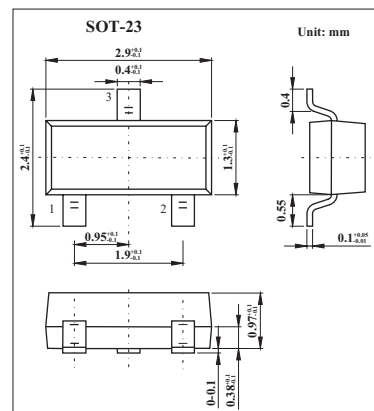


## ULTRA HIGH SPEED SWITCHING APPLICATION

## 1SS344

## ■ Features

- Low forward voltage:  $V_{F(3)} = 0.50V(\text{Typ})$ .
- Fast reverse recovery time:  $t_{rr} = 20\text{ns}(\text{Typ})$ .
- High average forward current:  $I_o = 0.5A(\text{Max})$ .

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

| Parameter                     | Symbol    | Rating      | Unit             |
|-------------------------------|-----------|-------------|------------------|
| Maximum(Peak) Reverse Voltage | $V_{RM}$  | 25          | V                |
| Reverse Voltage               | $V_R$     | 20          | V                |
| Maximum(Peak) Forward Current | $I_{FM}$  | 1500        | mA               |
| Average Rectified Current     | $I_o$     | 500         | mA               |
| Surge Current (10 ms)         | $I_{FSM}$ | 5           | A                |
| Power Dissipation             | $P$       | 200         | mW               |
| Junction Temperature          | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage Temperature Range     | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |
| Operating Temperature         | $T_{opr}$ | -40 to +100 | $^\circ\text{C}$ |

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

| Parameter                  | Symbol   | Test Conditions                | Min | Typ  | Max  | Unit          |
|----------------------------|----------|--------------------------------|-----|------|------|---------------|
| Continuous reverse voltage | $V_F$    | $I_F = 10 \text{ mA}$          |     | 0.30 |      | V             |
|                            |          | $I_F = 100 \text{ mA}$         |     | 0.38 |      |               |
|                            |          | $I_F = 500 \text{ mA}$         |     | 0.50 | 0.55 |               |
| Reverse current            | $I_R$    | $V_R = 30 \text{ V}$           |     |      | 20   | $\mu\text{A}$ |
|                            | $I_R$    | $V_R = 80 \text{ V}$           |     |      | 100  |               |
| capacitance                | $C_t$    | $V_R = 0, f = 1.0 \text{ MHz}$ |     | 120  |      | pF            |
| Reverse recovery time      | $t_{rr}$ | $I_F = 30 \text{ mA}$          |     | 20   |      | ns            |

## ■ Marking

|         |    |
|---------|----|
| Marking | H9 |
|---------|----|