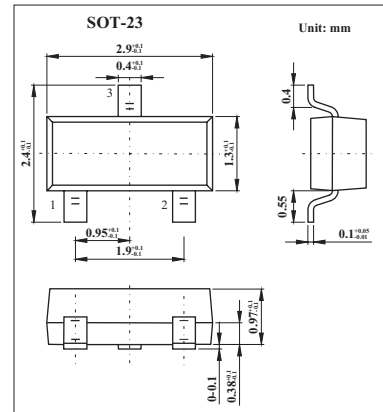


ULTRA HIGH SPEED SWITCHING APPLICATION

1SS196

■ Features

- Small Package
- Low forward voltage : $V_{F(3)} = 0.9\text{ V(Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6\text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 0.9\text{ pF(Typ.)}$

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

| Parameter | Symbol | Rating | Unit |
|---------------------------|-----------|--------------|------------------|
| Peak Reverse Voltage | V_{RM} | 85 | V |
| DC Reverse Voltage | V_R | 80 | V |
| Peak Reverse Current | I_{FM} | 300 | mA |
| Average Rectified Current | I_o | 100 | mA |
| Surge Current (10 ms) | I_{FSM} | 2 | A |
| DC Forward Current | P | 150 | mW |
| Junction Temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 to + 125 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|----------------------------|----------|-------------------------------|-----|------|-----|----------------|
| Continuous reverse voltage | V_F | $I_F = 1.0\text{ mA}$ | | 0.6 | | V |
| | | $I_F = 10\text{ mA}$ | | 0.72 | | |
| | | $I_F = 100\text{ mA}$ | | 0.9 | 1.2 | |
| Reverse current | I_R | $V_R = 30\text{ V}$ | | | 0.1 | $\mu\text{ A}$ |
| | | $V_R = 80\text{ V}$ | | | 0.5 | |
| Total capacitance | C_T | $V_R = 0, f = 1.0\text{ MHz}$ | | 0.9 | 3.0 | pF |
| Reverse recovery time | t_{rr} | $I_F = 10\text{ mA}$ | | 1.6 | 4.0 | ns |

■ Marking

| | |
|---------|----|
| Marking | G3 |
|---------|----|