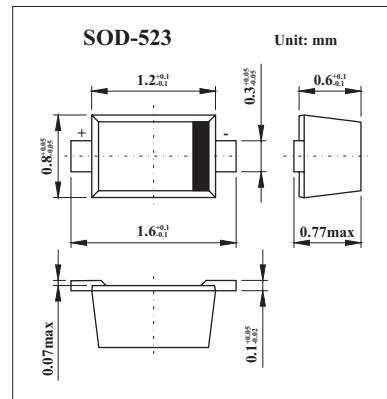


ULTRA HIGH SPEED SWITCHING APPLICATION

1SS387

■ Features

- Small Package
- Low forward voltage : $V_F(3) = 0.98V$ (TYP.)
- Fast Forward Voltage : $t_{rr} = 1.6ns$ (TYP.)
- Small Total Capacitance : $C_T = 0.5pF$ (TYP)

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

| Characteristic | Symbol | Rating | Unit |
|--------------------------------|-----------|--------------|------|
| Maximum (Peak) reverse voltage | V_{RM} | 85 | V |
| Reverse voltage | V_R | 80 | V |
| Maximum (Peak) forward current | I_{FM} | 200 | mA |
| Average forward current | I_o | 100 | mA |
| Surge current (10 ms) | I_{FSM} | 1 | A |
| Power dissipation | P | 150* | mW |
| Junction temperature | T_j | 125 | °C |
| Storage temperature range | T_{stg} | -55 to + 125 | °C |

* : Mounted on a glass epoxy circuit board of 20 × 20mm, pad dimension of 4 × 4mm.

■ Electrical Characteristics $T_a = 25^\circ C$

| Characteristic | Symbol | Conditions | Min | Typ | Max | Unit |
|----------------------------|----------|------------------------|-----|------|-----|---------|
| Continuous forward voltage | V_F | $I_F = 1 mA$ | | 0.62 | | V |
| | | $I_F = 10 mA$ | | 0.75 | | |
| | | $I_F = 100 mA$ | | 0.97 | 1.2 | |
| Reverse current | I_R | $V_R = 30 V$ | | | 0.1 | μA |
| | | $V_R = 80 V$ | | | 0.5 | |
| Total capacitance | C_T | $V_R = 0 V, f = 1 MHz$ | | 0.5 | 3.0 | pF |
| Reverse recovery time | t_{rr} | $I_F = 10 mA$ | | 1.6 | 4.0 | ns |

■ Marking

| | |
|---------|----|
| Marking | C1 |
|---------|----|