

TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

1SS385F

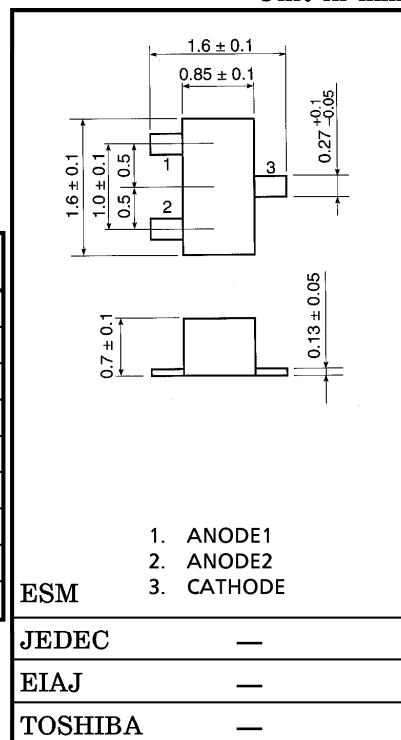
HIGH SPEED SWITCHING

Unit in mm

- Low Forward Voltage : $V_F = 0.23 \text{ V (Typ.) @ } I_F = 5 \text{ mA}$
- Ultra-Small Package

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--------------------------------|-----------|---------|------------------|
| Maximum (Peak) Reverse Voltage | V_{RM} | 15 | V |
| Reverse Voltage | V_R | 10 | 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 | 100 | mW |
| Junction Temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55~125 | $^\circ\text{C}$ |
| Operating Temperature Range | T_{opr} | -40~100 | $^\circ\text{C}$ |



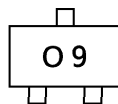
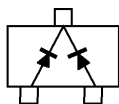
(*) Unit Rating. Total Rating = Unit Rating \times 1.5

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------|----------|------------------------------|------|------|------|---------------|
| Forward Voltage | $V_F(1)$ | $I_F = 1 \text{ mA}$ | — | 0.18 | — | V |
| | $V_F(2)$ | $I_F = 5 \text{ mA}$ | — | 0.23 | 0.30 | V |
| | $V_F(3)$ | $I_F = 100 \text{ mA}$ | — | 0.35 | 0.50 | V |
| Reverse Current | I_R | $V_R = 10 \text{ V}$ | — | — | 20 | μA |
| Total Capacitance | C_T | $V_R = 0, f = 1 \text{ MHz}$ | — | 20 | 40 | pF |

EQUIVALENT CIRCUIT (TOP VIEW)

Marking



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