

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# 1SS391

Low Voltage High Speed Switching

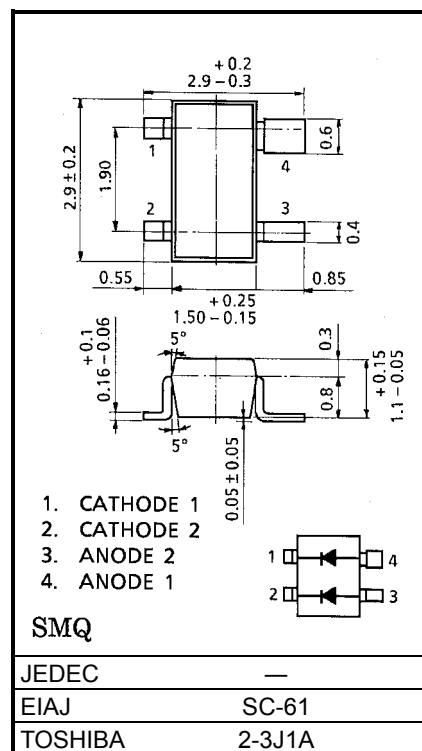
Unit: mm

- Low forward voltage :  $V_F (2) = 0.23V$  (typ.) @  $I_F = 5mA$
- Small package : SC-61

## Maximum Ratings ( $T_a = 25^\circ C$ )

| 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 (10ms)           | $I_{FSM}$ | 1 *     | A          |
| Power dissipation              | P         | 150     | mW         |
| Junction temperature           | $T_j$     | 125     | $^\circ C$ |
| Storage temperature range      | $T_{stg}$ | -55~125 | $^\circ C$ |
| Operating temperature range    | $T_{opr}$ | -40~100 | $^\circ C$ |

\*: Unit rating. Total rating = unit rating  $\times$  1.5



Weight: 0.013g

## Electrical Characteristics ( $T_a = 25^\circ C$ )

| Characteristic    | Symbol    | Test Circuit | Test Condition      | Min | Typ. | Max  | Unit    |
|-------------------|-----------|--------------|---------------------|-----|------|------|---------|
| Forward voltage   | $V_F (1)$ | —            | $I_F = 1mA$         | —   | 0.18 | —    | V       |
|                   | $V_F (2)$ | —            | $I_F = 5mA$         | —   | 0.23 | 0.30 | V       |
|                   | $V_F (3)$ | —            | $I_F = 100mA$       | —   | 0.35 | 0.50 | V       |
| Reverse current   | $I_R$     | —            | $V_R = 10V$         | —   | —    | 20   | $\mu A$ |
| Total capacitance | $C_T$     | —            | $V_R = 0, f = 1MHz$ | —   | 20   | 40   | pF      |

## Marking

