

TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

1SS396

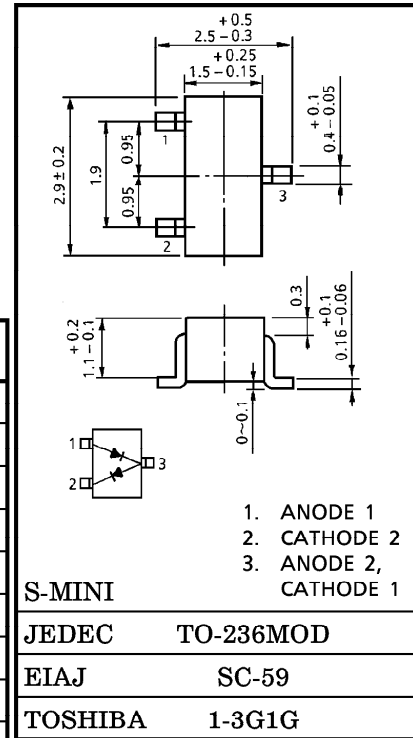
LOW VOLTAGE HIGH SPEED SWITCHING

Unit in mm

- Low Forward Voltage :  $V_F(3) = 0.54V$  (Typ.)
- Low Reverse Current :  $I_R = 5\mu A$  (Max.)
- Small Package : SC-59

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

| CHARACTERISTIC                 | SYMBOL    | RATING         | UNIT       |
|--------------------------------|-----------|----------------|------------|
| Maximum (Peak) Reverse Voltage | $V_{RM}$  | 45             | V          |
| Reverse Voltage                | $V_R$     | 40             | V          |
| Maximum (Peak) Forward Current | $I_{FM}$  | 300 *          | 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      | $T_{stg}$ | $-55 \sim 125$ | $^\circ C$ |
| Operation Temperature Range    | $T_{opr}$ | $-40 \sim 100$ | $^\circ C$ |



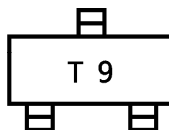
Weight : 0.012g

\* : Unit Rating. Total Rating=Unit Rating $\times$ 0.7

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

| CHARACTERISTIC    | SYMBOL   | TEST CONDITION      | MIN. | TYP. | MAX. | UNIT    |
|-------------------|----------|---------------------|------|------|------|---------|
| Forward Voltage   | $V_F(1)$ | $I_F = 1mA$         | —    | 0.28 | —    | V       |
|                   | $V_F(2)$ | $I_F = 10mA$        | —    | 0.36 | —    |         |
|                   | $V_F(3)$ | $I_F = 100mA$       | —    | 0.54 | 0.60 |         |
| Reverse Current   | $I_R$    | $V_R = 40V$         | —    | —    | 5    | $\mu A$ |
| Total Capacitance | $C_T$    | $V_R = 0, f = 1MHz$ | —    | 18   | 25   | pF      |

MARKING



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