TOSHIBA Diode Silicon Epitaxial Planar Type

# 1SS379

### **General Purpose Rectifier Applications**

- AEC-Q101 Qualified (Note1)
- Small package
  - Low forward voltage  $: V_F = 1.0V$  (typ.)

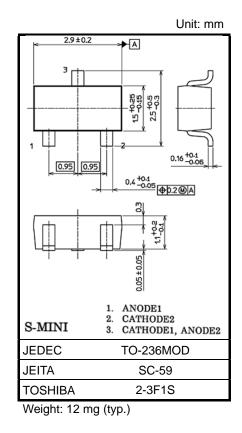
: SC-59

- Low reverse current  $I_R = 0.1 nA$  (typ.)
- Small total capacitance  $: C_T = 3.0 pF (typ.)$

Absolute Maximum Ratings (Ta = 25°C)

Note1: For detail information, please contact to our sales.

#### Characteristic Symbol Rating Unit Maximum (peak) reverse Voltage Vrm 85 V Reverse voltage $V_{R}$ 80 V 300 \* Maximum (peak) forward current mΑ IFM Average forward current 100 \* lo mΑ 2 \* Surge current (10ms) IFSM А Power dissipation Ρ 150 mW Junction temperature Тj 125 °C °C Storage temperature range -55 to 125 Tstg



- Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).
  - \*: Unit rating. Total rating = unit rating × 0.7

### Electrical Characteristics (Ta = 25°C)

| Characteristic    | Symbol         | Test Condition        | Min. | Тур. | Max. | Unit |
|-------------------|----------------|-----------------------|------|------|------|------|
| Forward voltage   | VF             | IF = 100mA            | _    | 1.0  | 1.3  | V    |
| Reverse current   | I <sub>R</sub> | V <sub>R</sub> = 80V  | _    | 0.1  | 10   | nA   |
| Total capacitance | Ст             | $V_R = 0V, f = 1MH_Z$ |      | 3.0  | 6.0  | pF   |

### Equivalent Circuit (Top View)

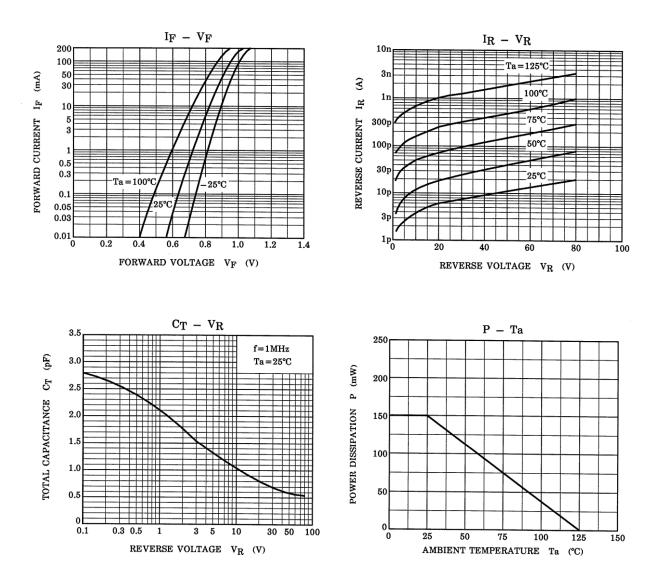


#### Marking



Start of commercial production 1994-01

### **TOSHIBA**



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