TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS348**

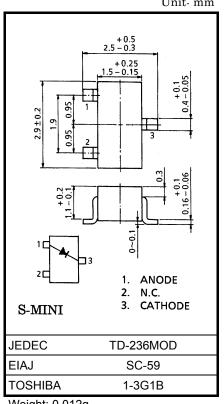
#### Low Voltage High Speed Switching

•	Low forward voltage	$V_{\rm F}(3) = 0.56 V (typ.)$
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- Low reverse current
  - Small package : SC-59
- $I_{R} = 5\mu A (max)$

### Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V <sub>RM</sub>	85	V
Reverse voltage	V <sub>R</sub>	80	V
Maximum (peak) forward current	I <sub>FM</sub>	300	mA
Average forward current	Ι <sub>Ο</sub>	100	mA
Power dissipation	Р	200	mW
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55~125	°C
Operating Temperature	T <sub>opr</sub>	-40~100	°C



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.

Weight: 0.012g

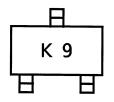
operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

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).

#### Test Characteristic Symbol Test Condition Min Unit Тур. Max Circuit $I_F = 1mA$ 0.26 V<sub>F (1)</sub> Forward voltage V<sub>F (2)</sub> $I_F = 10mA$ 0.34 V I<sub>F</sub> = 100mA 0.56 0.70 V<sub>F (3)</sub> \_ \_ Reverse current V<sub>R</sub> = 80V 5 μA I<sub>R (1)</sub> \_ \_\_\_\_ pF Total capacitance $C_{\mathsf{T}}$ V<sub>R</sub> = 0, f = 1MHz 45 100

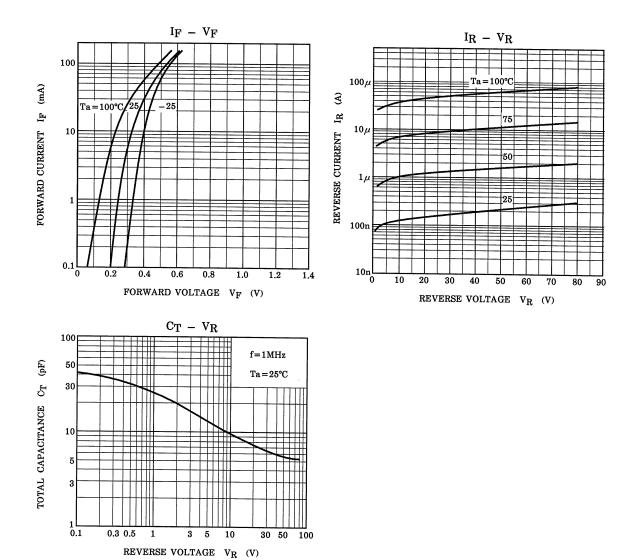
### Electrical Characteristics (Ta = 25°C)

#### Marking



Unit: mm

## **TOSHIBA**



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20070701-EN GENERAL

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