TOSHIBA Diode Silicon Epitaxial Schottky Planar Type

## **1SS349**

### **Ultra High Speed Switching Application**

• Low forward voltage  $: V_F(3) = 0.49V \text{ (typ.)}$ • Low reverse current  $: I_R = 50\mu\text{A (max)}$ 

• Small package : SC-59

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	25	V
Reverse voltage	$V_{R}$	20	>
Maximum (peak) forward current	I <sub>FM</sub>	3000	mA
Average forward current	IO	1000	mA
Power dissipation	Р	200	mW
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	<b>-</b> 55~125	°C
Operating Temperature	T <sub>opr</sub>	<b>−</b> 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. 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).

# 1000-

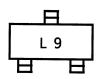
	Unit: mm
2.9±0.2	+0.5 2.5-0.3 +0.25 1.5-0.15 1 000 + 1 000 + 1 000
11 + 07	0-0.1
S-MINI	<ol> <li>ANODE</li> <li>N.C.</li> <li>CATHODE</li> </ol>
JEDEC	TD-236MOD
EIAJ	SC-59
TOSHIBA	1-3G1B

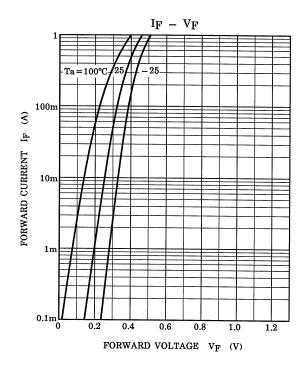
Weight: 0.012g

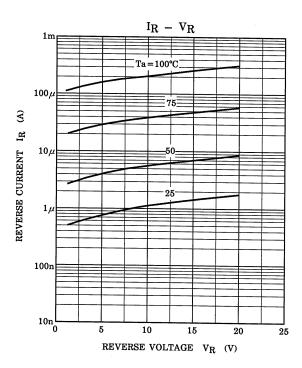
### **Electrical Characteristics (Ta = 25°C)**

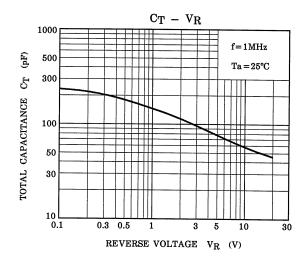
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 100mA	_	0.34	_		
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 500mA	_	0.42	_	V	
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 1000mA	_	0.49	0.55		
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 20V	_	_	50	μΑ	
Total capacitance	C <sub>T</sub>	_	V <sub>R</sub> = 0, f = 1MHz	1	250	_	pF	

### Marking









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20070701-EN GENERAL

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