TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS294**

## Low Voltage High Speed Switching

• Low forward voltage  $: V_F(3) = 0.54V \text{ (typ.)}$ • Low reverse surrent  $: I_R = 5\mu\text{A (max)}$ 

• Small package : SC-59

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	45	V
Reverse voltage	V <sub>R</sub>	40	V
Maximum (peak) forward current	I <sub>FM</sub>	300	mA
Average forward current	Io	100	mA
Power dissipation	Р	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C

Unit

V

V

mA

mA

mW

°C

JE

TC

Weight: 0.012g (typ.)

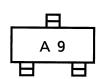
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in

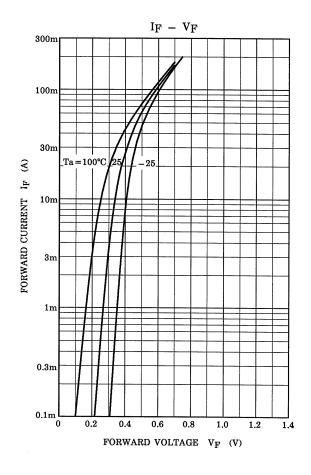
temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings. Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

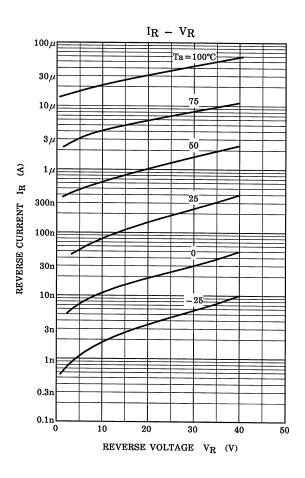
#### **Electrical Characteristics (Ta = 25°C)**

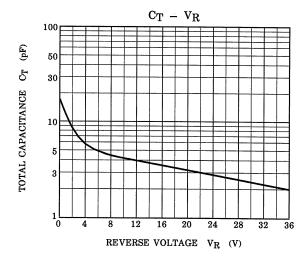
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 1mA	_	0.28	_		
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 10mA	_	0.36	_	V	
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 100mA	_	0.54	0.60		
Reverse current	I <sub>R</sub>	_	V <sub>R</sub> = 40V	_	_	5	μΑ	
Total capacitance	C <sub>T</sub>	_	V <sub>R</sub> = 0, f = 1MHz	_	18	25	pF	

#### Marking









2

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3