Unit: mm

TOSHIBA Diode Silicon Epitaxial Planar Type

## **1SS300**

### **Ultra High Speed Switching Applications**

• Small package : SC-70

### Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	85	V
Reverse voltage	V <sub>R</sub>	80	V
Maximum (peak) forward current	I <sub>FM</sub>	300 (*)	mA
Average forward current	Io	100 (*)	mA
Surge current (10ms)	I <sub>FSM</sub>	2 (*)	Α
Power dissipation	Р	100	mW
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55~125	°C

<sup>\*:</sup> Unit rating. Total rating = unit rating × 1.5

# 2.1±0.1 1.25±0.1 1.01 ± 0.0

SC-70

1-2P1A

Weight: 0.006g

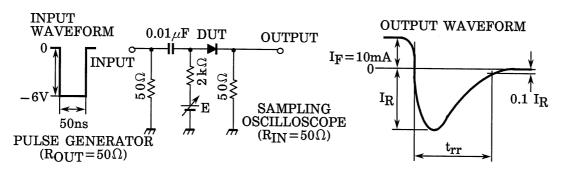
EIAJ

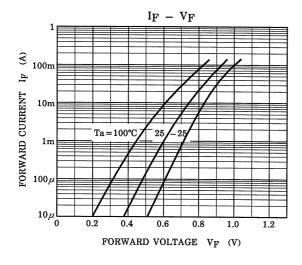
TOSHIBA

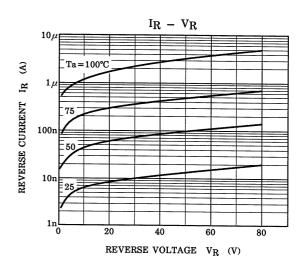
### **Electrical Characteristics (Ta = 25°C)**

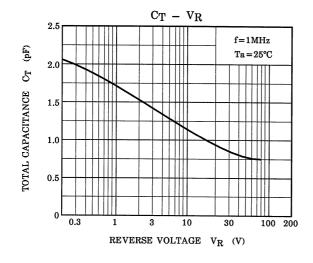
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 1mA	_	0.61	_	
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 10mA	_	0.74	_	V
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 100mA	_	0.92	1.20	
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 30V	_	_	0.1	μА
	I <sub>R (2)</sub>	_	V <sub>R</sub> = 80V	_	_	0.5	
Total capacitance	Ст	_	V <sub>R</sub> = 0, f = 1MHz		2.2	4.0	pF
Reverse recovery time	t <sub>rr</sub>	_	I <sub>F</sub> = 10mA, Fig.1	_	1.6	4.0	ns

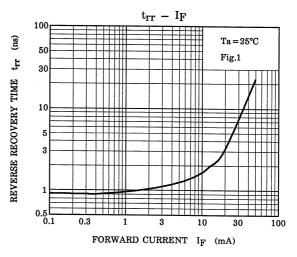
Fig.1 Reverse Recovery Time (trr) Test Circuit Marking











2 2001-06-07

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