Unit in mm

### TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

# **SS370**

### HIGH VOLTAGE, HIGH SPEED SWITCHING APPLICATIONS

Low Forward Voltage  $V_{F(2)} = 0.9V (TYP.)$ :  $t_{rr} = 60 \text{ns} (MAX.)$ Fast Reverse Recovery Time :  $C_T = 1.5 pF (TYP.)$ Small Total Capacitance

Small Package : SC-70

### MAXIMUM RATING (Ta = 25°C)

CHARACTERISTIC	SYMBOL	MBOL RATING	
Maximum (Peak) Reverse Voltage	$v_{RM}$	250	V
Reverse Voltage	$V_{\mathbf{R}}$	200	V
Maximum (Peak) Forward Current	$I_{FM}$	300	mA
Average Forward Current	IO	100	mA
Surge Current (10ms)	$I_{FSM}$	2	A
Power Dissipation	P	100	mW
Junction Temperature	$T_j$	125	$^{\circ}\mathrm{C}$
Storage Temperature Range	$T_{ m stg}$	-55~125	°C

# $2.1 \pm 0.1$ 0.65 1.3±0.1 1. ANODE 2. N.C. 3. CATHODE **JEDEC** EIAJ SC-70 TOSHIBA 1-2P1D

### Weight: 0.006g

### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

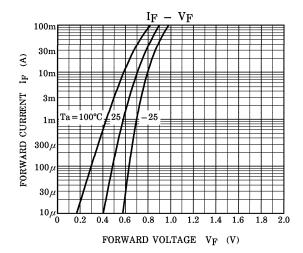
	•					
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
rorward voitage	$V_{F(1)}$	$I_{\mathbf{F}} = 10 \text{mA}$	1	0.72	1.0	V
	$V_{F(2)}$	$I_{ m F}$ = 100mA		0.90	1.2	
Reverse Current	I <sub>R (1)</sub>	$V_R = 50V$	1	_	0.1	$\mu$ A
	$I_{R(2)}$	$V_R = 200V$	1	_	1.0	
Total Capacitance	$\mathbf{C_T}$	$V_R=0$ , f=1MHz	1	1.5	3.0	рF
Reverse Recovery Time	$ m t_{rr}$	I <sub>F</sub> =10mA, Fig.1		10	60	ns

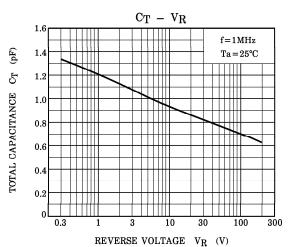
Fig.1: REVERSE RECOVERY TIME  $(t_{rr})$  TEST CIRCUIT

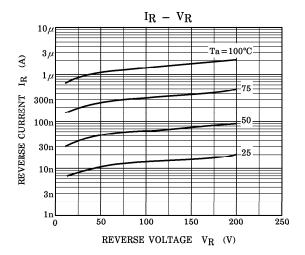
#### **MARKING**

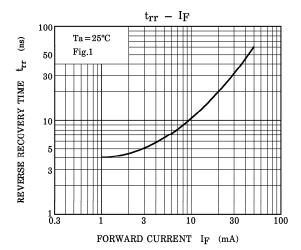
#### INPUT WAVEFORM **OUTPUT WAVEFORM** INPUT 0.01 µF DUT OUTPUT $I_F = 10mA$ 0 500 $0.1 I_{R}$ $I_{\mathbf{R}}$ -6VSAMPLING 50ns OSCILLOSCOPE PULSE GENERATOR $(R_{IN} = 50\Omega)$ $(R_{OUT} = 50\Omega)$

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