

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

1SS368

ULTRA HIGH SPEED SWITCHING APPLICATION

- Small Package
- Low Forward Voltage : $V_F(3)=0.98V$ (TYP.)
- Fast Reverse Recovery Time : $t_{rr}=1.6ns$ (TYP.)
- Small Total Capacitance : $C_T=0.5pF$ (TYP.)

MAXIMUM RATING ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Maximum (Peak) Forward Current	I_{FM}	200	mA
Average Forward Current	I_O	100	mA
Surge Current (10ms)	I_{FSM}	1	A
Power Dissipation	P	150 ※	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	$-55\sim 125$	$^\circ C$

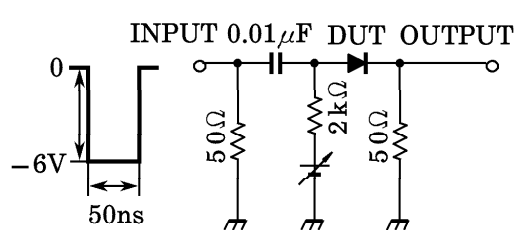
※ : Mounted on a glass epoxy circuit board of $20\times 20mm$, pad dimension of $4\times 4mm$.

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

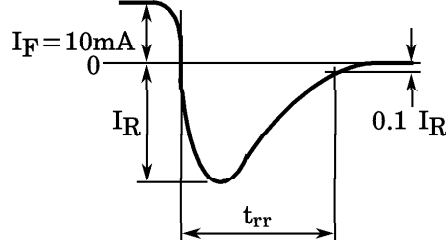
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F(1)$	$I_F=1mA$	—	0.62	—	V
	$V_F(2)$	$I_F=10mA$	—	0.75	—	
	$V_F(3)$	$I_F=100mA$	—	0.98	1.20	
Reverse Current	$I_R(1)$	$V_R=30V$	—	—	0.1	μA
	$I_R(2)$	$V_R=80V$	—	—	0.5	
Total Capacitance	C_T	$V_R=0, f=1MHz$	—	0.5	3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$, Fig.1	—	1.6	4.0	ns

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

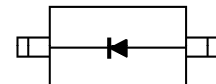
INPUT WAVEFORM



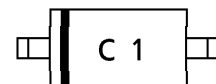
OUTPUT WAVEFORM



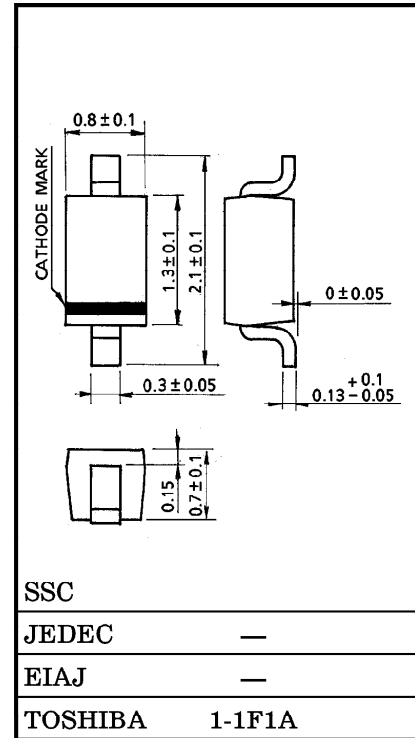
PIN ASSIGNMENT
(TOP VIEW)



MARKING



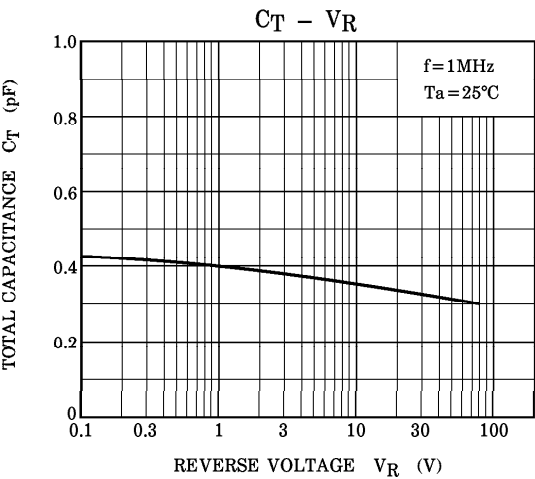
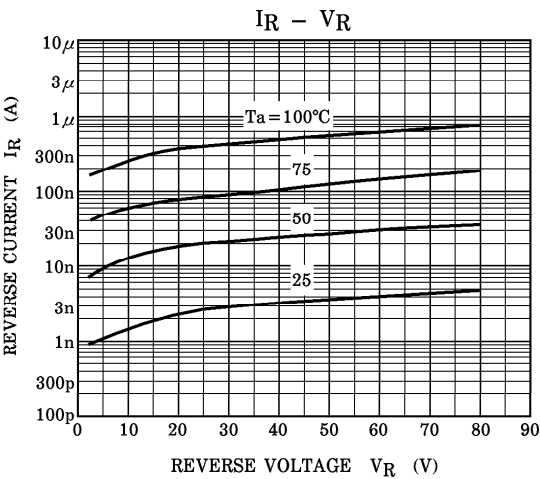
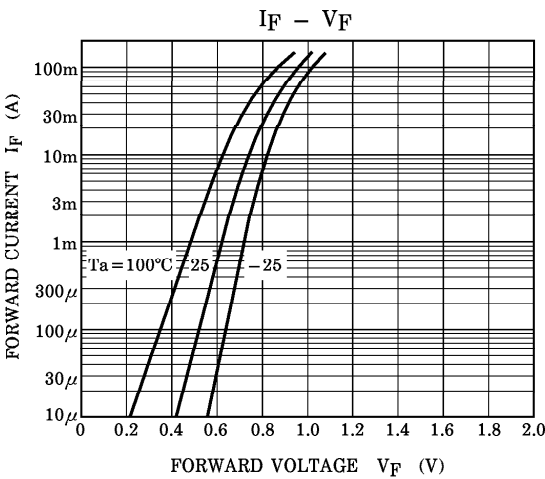
Unit in mm



Weight : 1.9mg

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