

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

# 1SS352

ULTRA HIGH SPEED SWITCHING APPLICATION.

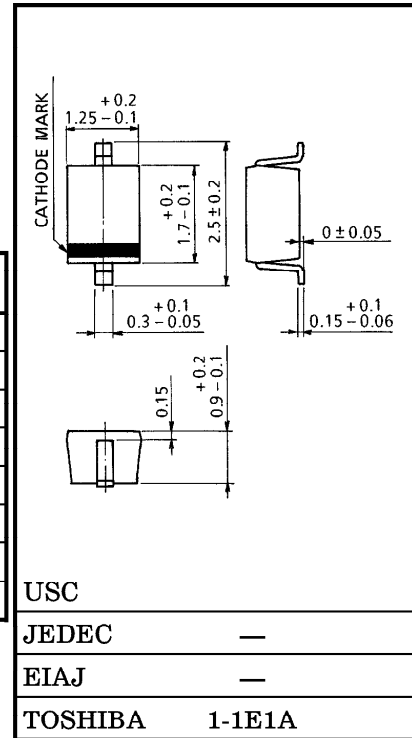
Unit in mm

- 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 RATINGS ( $T_a = 25^\circ C$ )

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	200 (*)	mW
Junction Temperature	$T_j$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~125	$^\circ C$

(\*) Mounted on a glass epoxy circuit board of 20×20mm, pad dimension of 4×4mm.



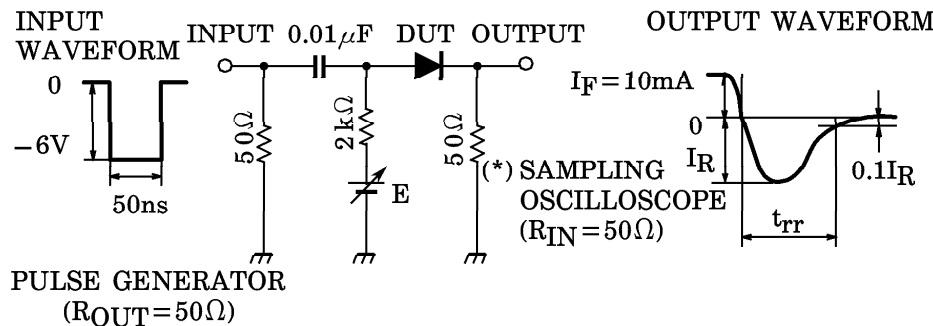
ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

Weight : 0.004g

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	$\mu A$
	$I_R(2)$	$V_R = 80V$	—	—	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

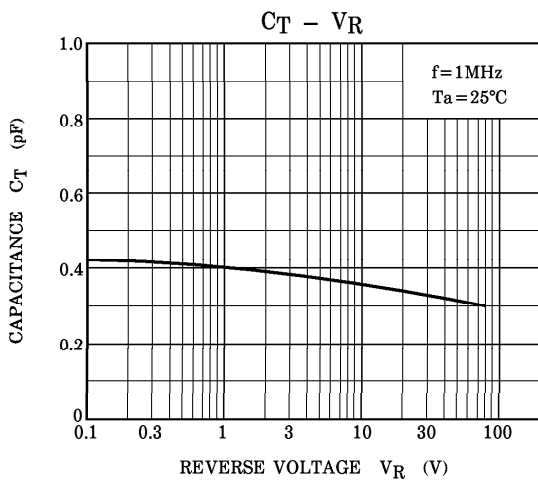
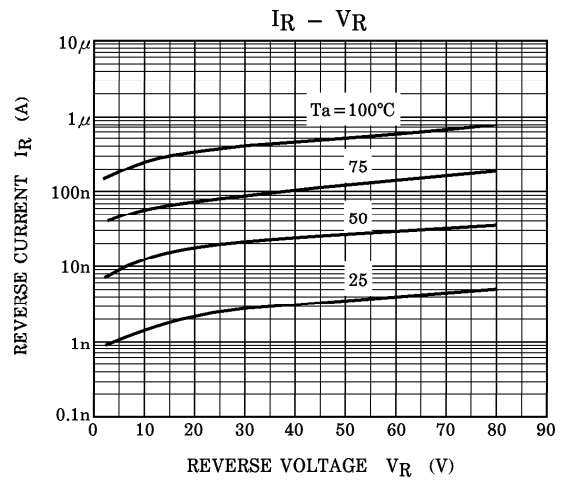
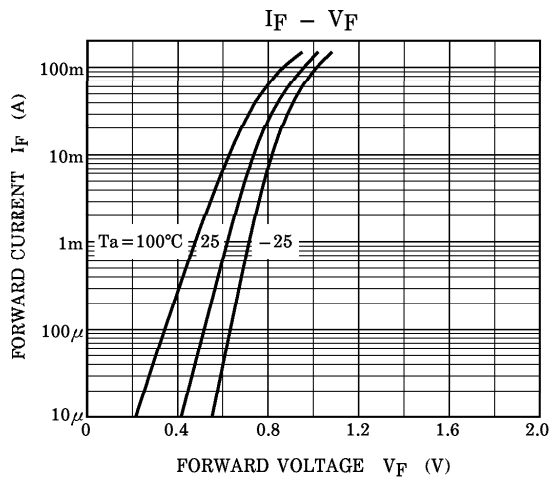
PIN ASSIGNMENT (TOP VIEW) MARKING



PULSE GENERATOR ( $R_{OUT} = 50\Omega$ )

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