

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

# 1SS337

ULTRA HIGH SPEED SWITCHING APPLICATION.

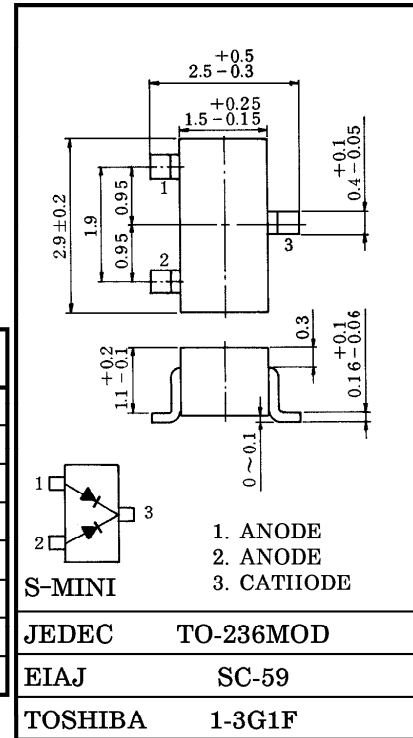
Unit in mm

- Small Package : SC-59
- Low Forward Voltage :  $V_{F(3)} = 0.88V$  (Typ.)
- Fast Reverse Recovery Time :  $t_{rr} = 6ns$  (Typ.)
- Small Total Capacitance :  $C_T = 1.6pF$  (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	$I_{FM}$	600*	mA
Average Forward Current	$I_O$	200*	mA
Surge Current (10ms)	$I_{FSM}$	6*	A
Power Dissipation	P	150	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55~150	$^\circ C$

\* Unit Rating. Total Rating = Unit Rating  $\times$  1.5

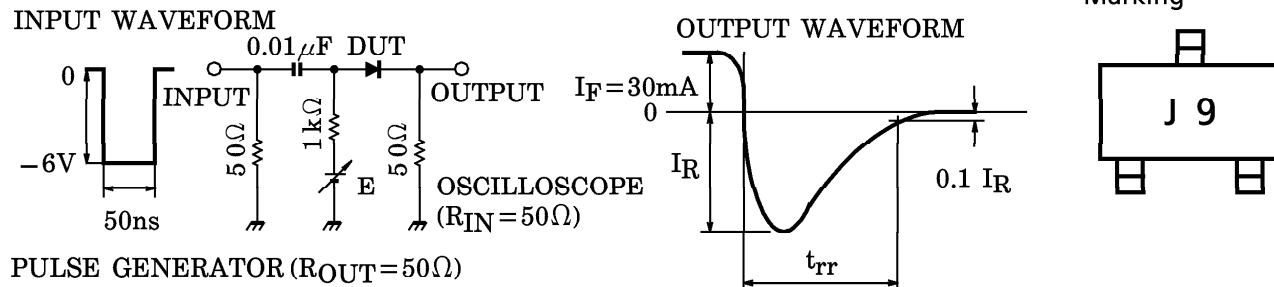


Weight : 0.012g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	$I_F = 10mA$	—	0.66	—	V
	$V_{F(2)}$	$I_F = 100mA$	—	0.80	—	
	$V_{F(3)}$	$I_F = 200mA$	—	0.88	1.20	
Reverse Current	$I_{R(1)}$	$V_R = 30V$	—	—	0.25	$\mu A$
	$I_{R(2)}$	$V_R = 80V$	—	—	0.50	
Total Capacitance	$C_T$	$V_R = 0, f = 1MHz$	—	1.6	—	pF
Reverse Recovery Time	$t_{rr}$	$I_F = 30mA, Fig.1$	—	6	20	ns

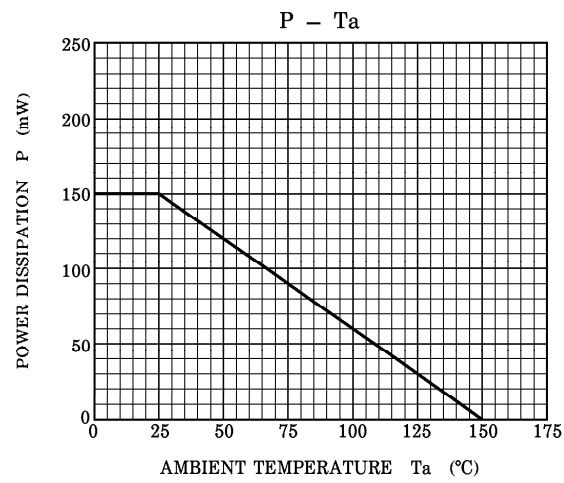
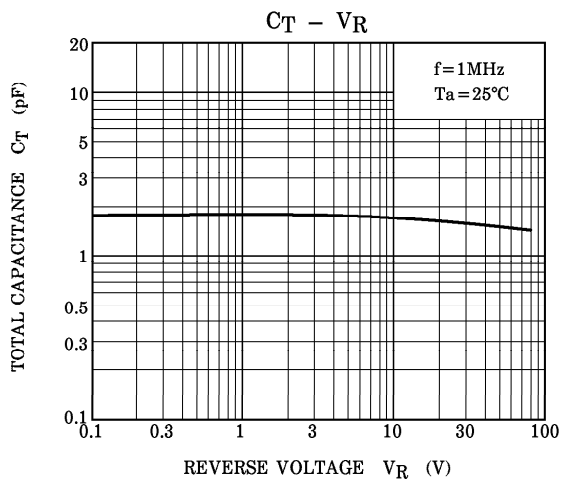
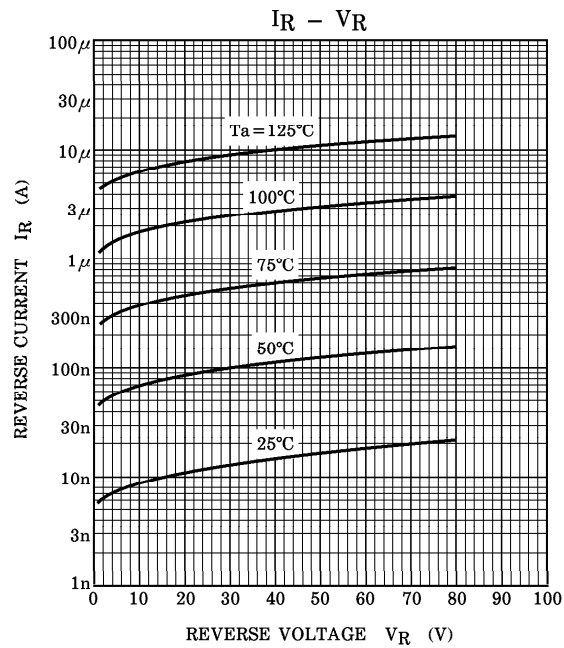
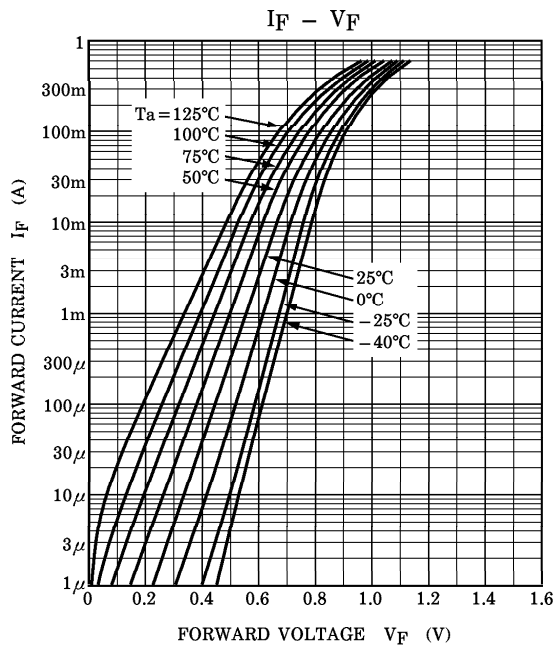
Fig.1 REVERSE RECOVERY TIME ( $t_{rr}$ ) TEST CIRCUIT



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

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