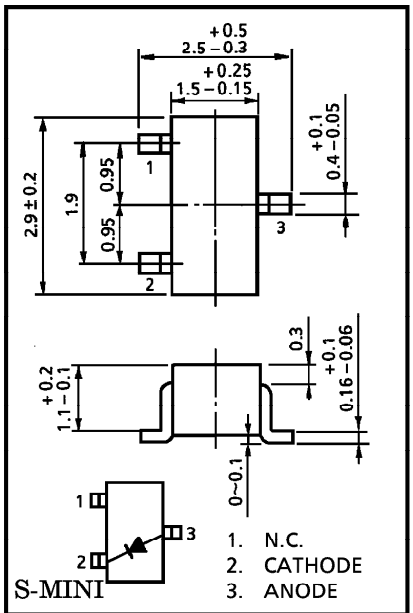
TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

1SS190

ULTRA HIGH SPEED SWITCHING APPLICATION.

Unit in mm

- Small Package : SC-59
- Low Forward Voltage : $V_{F(3)}$ = 0.92V (Typ.)
- Fast Reverse Recovery Time : t_{rr} = 1.6ns (Typ.)
- Small Total Capacitance : C_T = 2.2pF (Typ.)



JEDEC	TO-236MOD
EIAJ	SC-59
TOSHIBA	1-3G1C

Weight : 0.012g

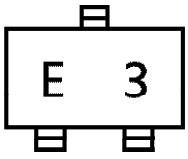
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Maximum (Peak) Forward Current	I_{FM}	300	mA
Average Forward Current	I_O	100	mA
Surge Current (10ms)	I_{FSM}	2	A
Power Dissipation	P	150	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	I_F = 1mA	—	0.61	—	V
	$V_{F(2)}$	I_F = 10mA	—	0.74	—	
	$V_{F(3)}$	I_F = 100mA	—	0.92	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	—	2.2	4.0	pF
Reverse Recovery Time	t_{rr}	I_F = 10mA (Fig.1)	—	1.6	4.0	ns

MARKING



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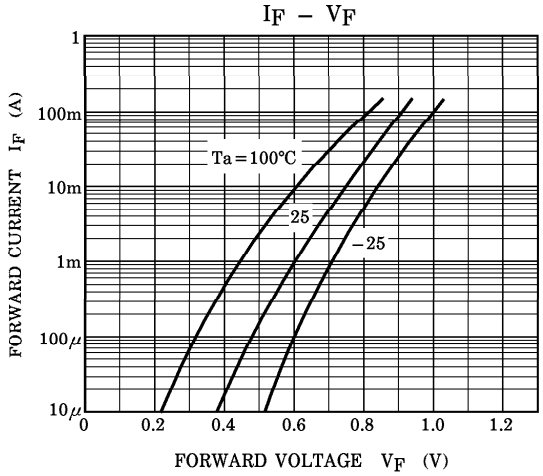
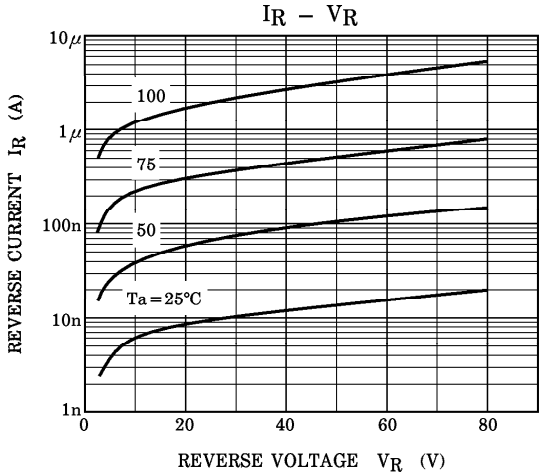
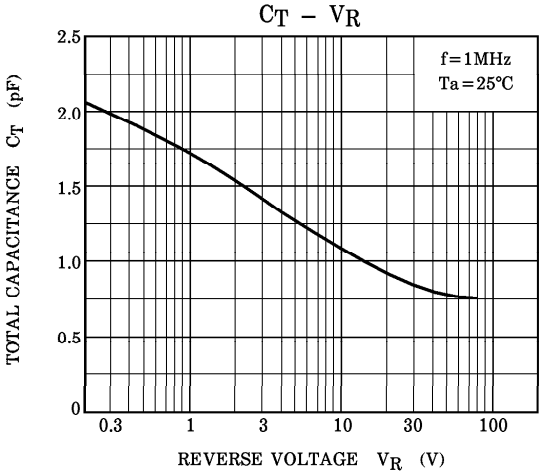






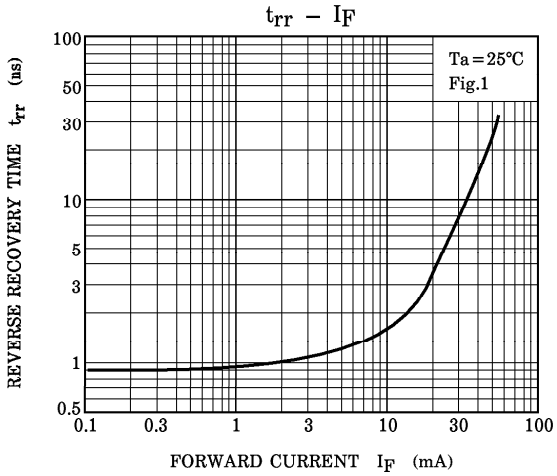
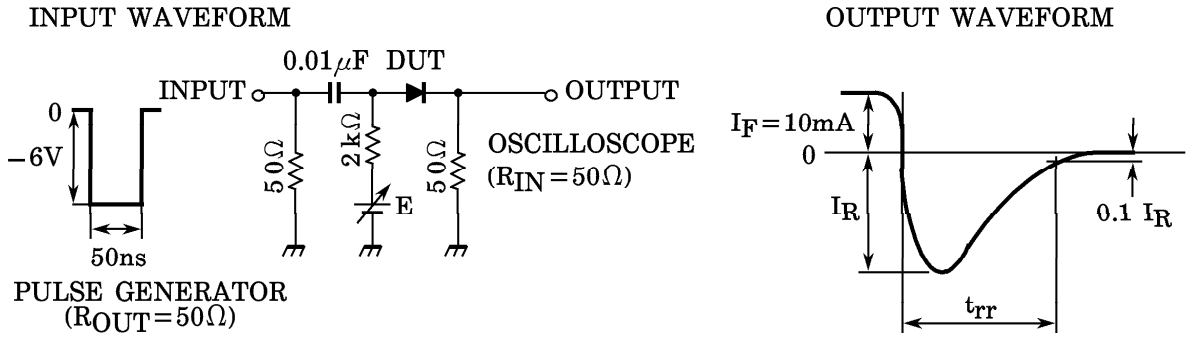


Fig.1 Reverse recovery time (t_{rr}) test circuit



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