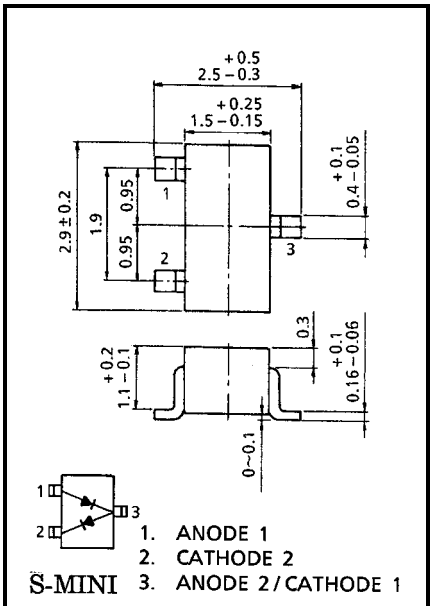
TOSHIBA Diode Silicon Epitaxial Planar Type

1SS226

Ultra High Speed Switching Application

- Small package : SC-59
- Low forward voltage : $V_{F\ (3)}$ = 0.9V (typ.)
- Fast reverse recovery time : t_{rr} = 1.6ns (typ.)
- Small total capacitance : C_T = 0.9pF (typ.)

Unit: mm



JEDEC	TO−236MOD
EIAJ	SC−59
TOSHIBA	1−3G1G

Weight: 0.012g

Maximum Ratings (Ta = 25°C)

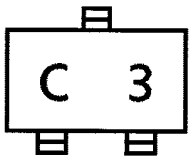
Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Maximum (peak) forward current	I_{FM}	300 (*)	mA
Average forward current	I_O	100 (*)	mA
Surge current (10ms)	I_{FSM}	2 (*)	A
Power dissipation	P	150	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C

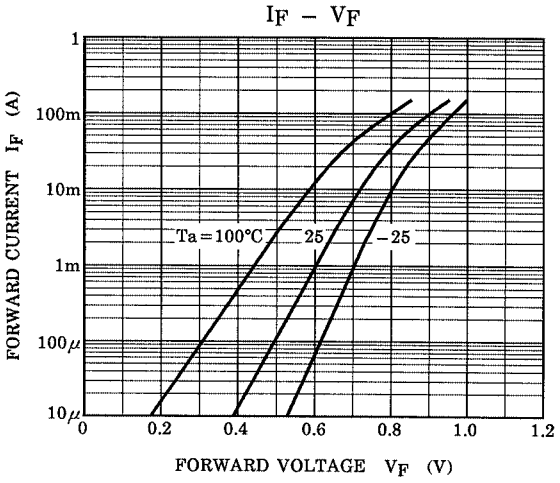
(*) Unit rating. Total rating = Unit rating × 0.7.

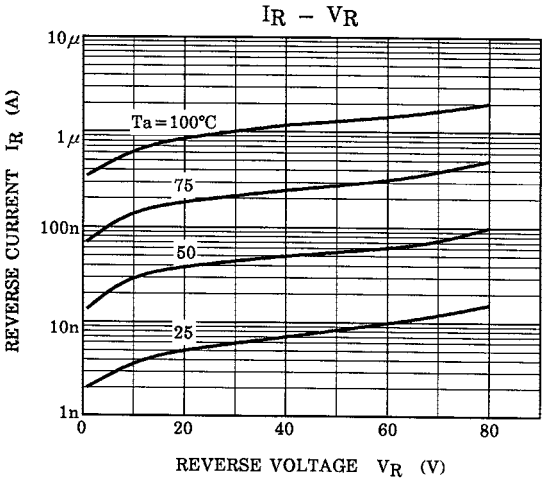
Electrical Characteristics (Ta = 25°C)

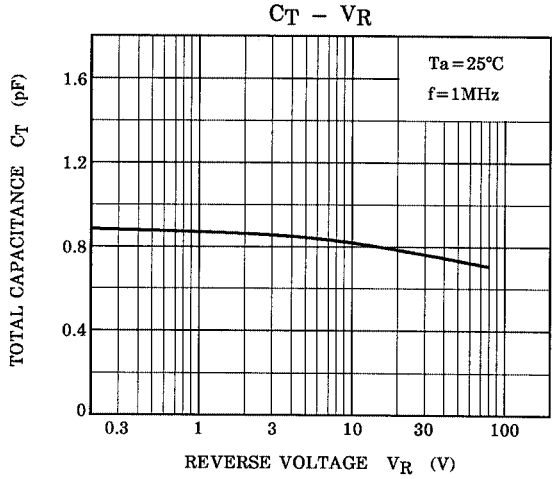
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_{F\ (1)}$	—	I_F = 1mA	—	0.60	—	V
	$V_{F\ (2)}$	—	I_F = 10mA	—	0.72	—	
	$V_{F\ (3)}$	—	I_F = 100mA	—	0.90	1.20	
Reverse current	$I_{R\ (1)}$	—	V_R = 30V	—	—	0.1	μA
	$I_{R\ (2)}$	—	V_R = 80V	—	—	0.5	
Total capacitance	C_T	—	V_R = 0, f = 1MHz	—	0.9	3.0	pF
Reverse recovery time	t_{rr}	—	I_F = 10mA (Fig.1)	—	1.6	4.0	ns

Marking









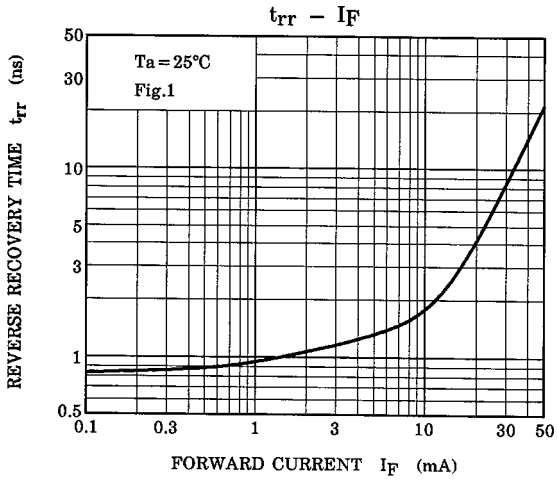
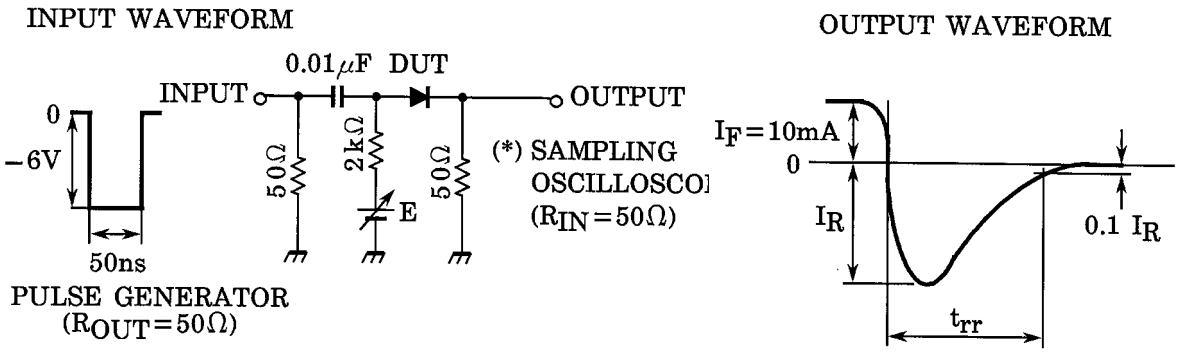


Fig.1 Reverse recovery time (t_{rr}) test circuit



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