

1SS201

Ultra High Speed Switching Application

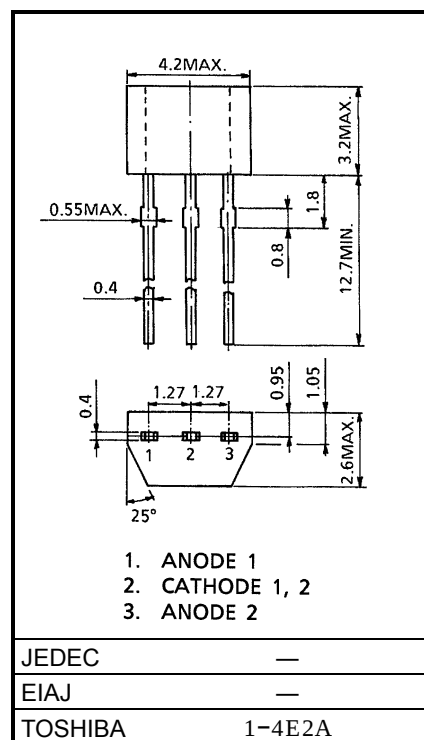
Unit in mm

- 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.)

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}	300 (*)	mA
Average forward current	I_O	100 (*)	mA
Surge current (10ms)	I_{FSM}	2 (*)	A
Power dissipation	P	200	mW
Junction temperature	T_j	125	$^\circ C$
Storage temperature range	T_{stg}	-55~125	$^\circ C$

(*) Unit rating. Total rating = Unit rating $\times$ 1.5.



Weight: 0.13g

Electrical Characteristics ($T_a = 25^\circ C$)

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

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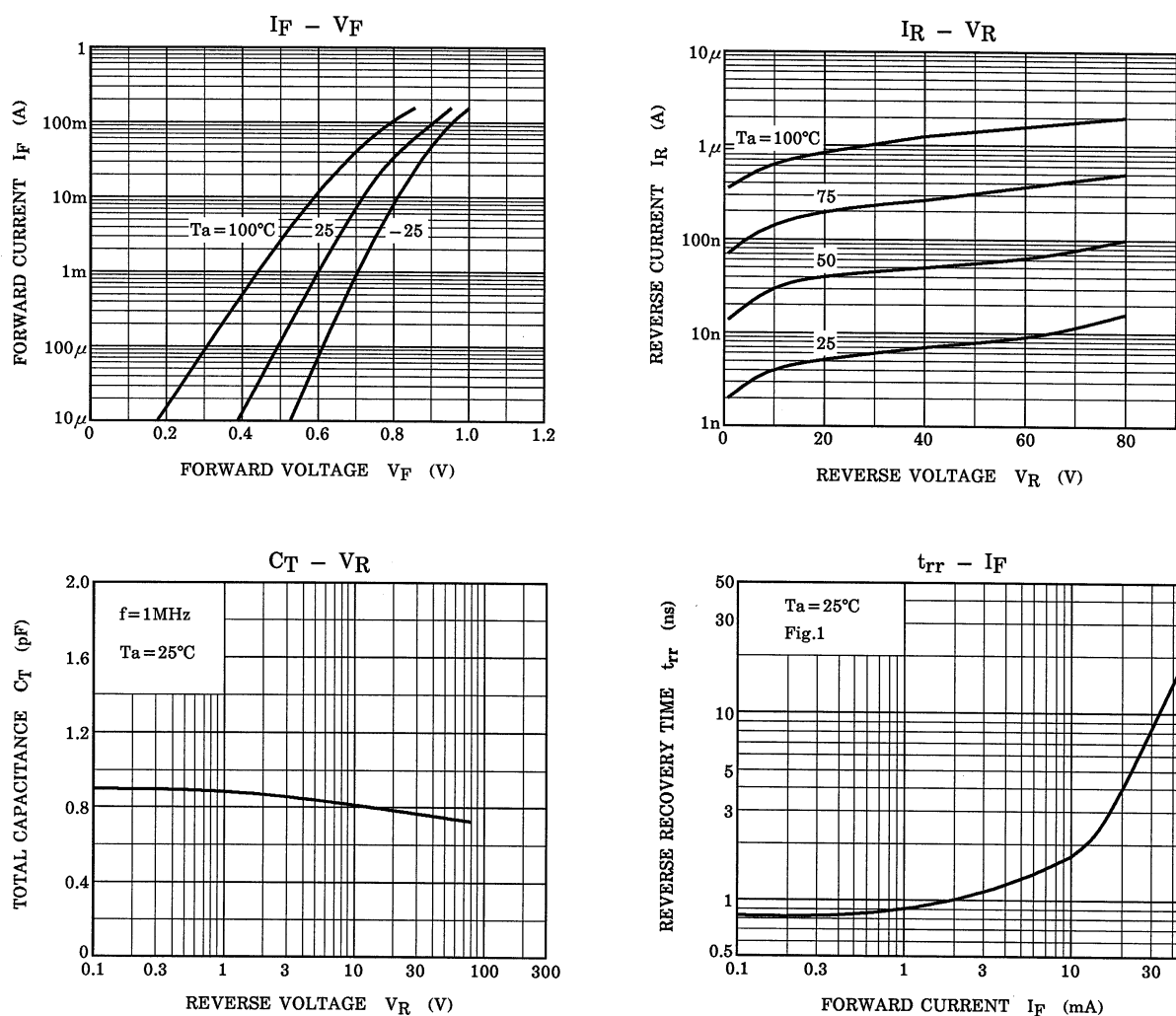


Fig.1 Reverse recovery time (t_{rr}) test circuit

