

1SS227

Silicon Epitaxial Planar Type
Diode

ULTRA HIGH SPEED SWITCHING APPLICATION.

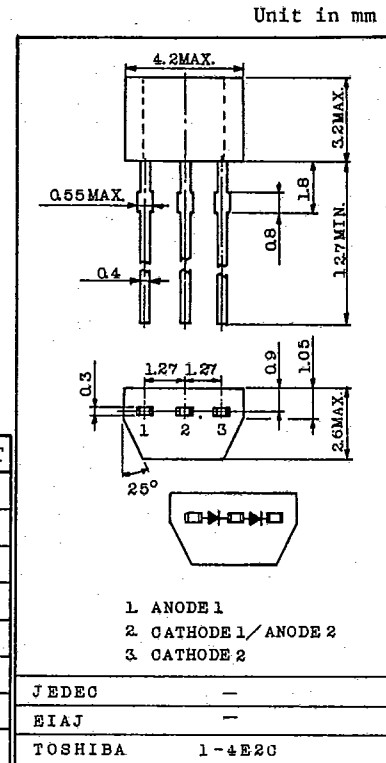
FEATURES:

- . Low Forward Voltage : $V_F=0.9V$ (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 $\times$ 0.7



Weight : 0.13g

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

CHARACTERISTIC	SYMBOL	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

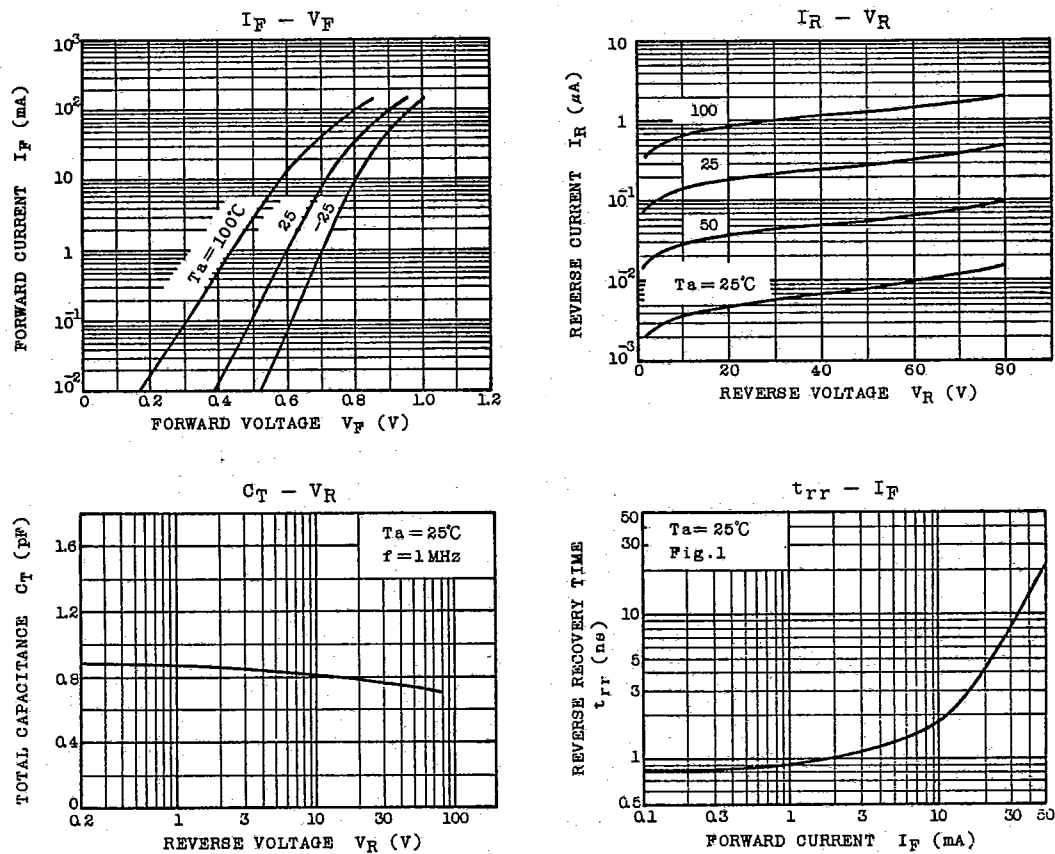


Fig 1 REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT

