



1SS193

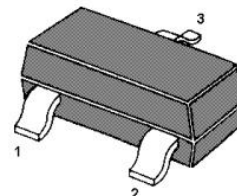
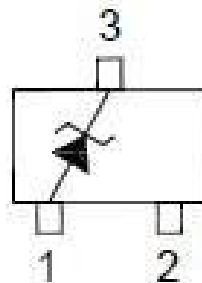
Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Applications

- Ultra high speed switching application



Marking Code: **5D**
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

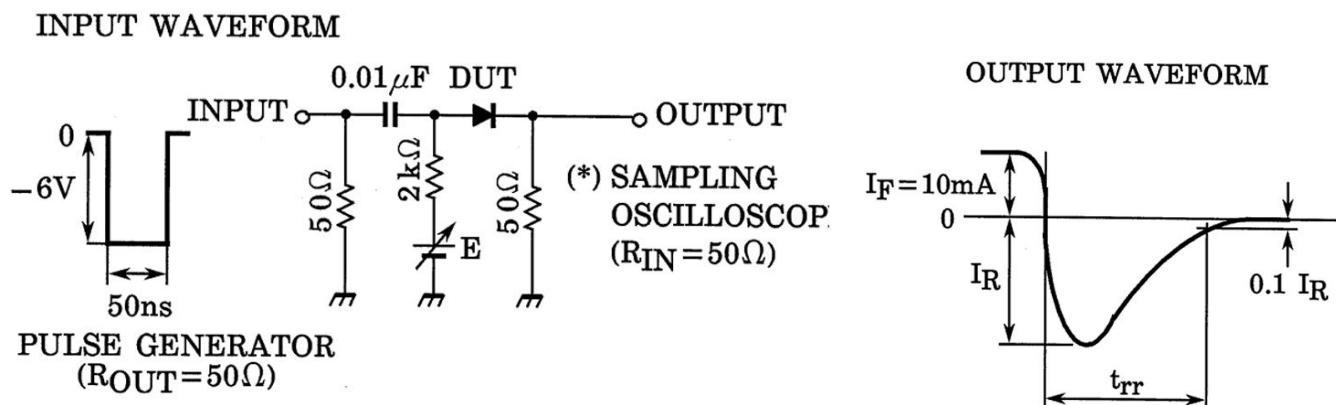
Parameter	Symbol	Limit	Unit
Maximum Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-repetitive Peak Forward Surge Current (10 ms)	I_{FSM}	2	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^{\circ}\text{C}$

Characteristics ($T_A=25^{\circ}\text{C}$)

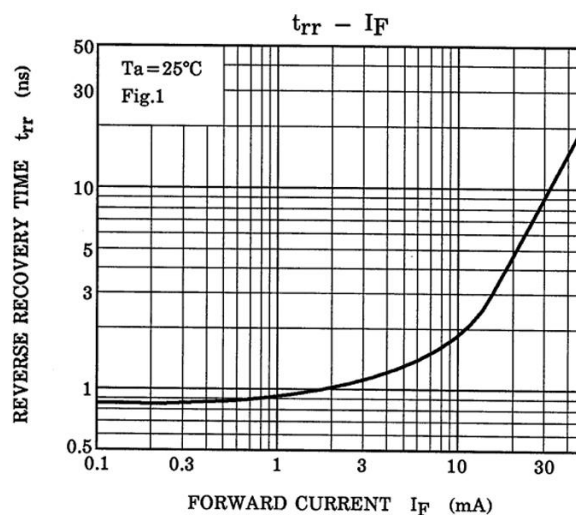
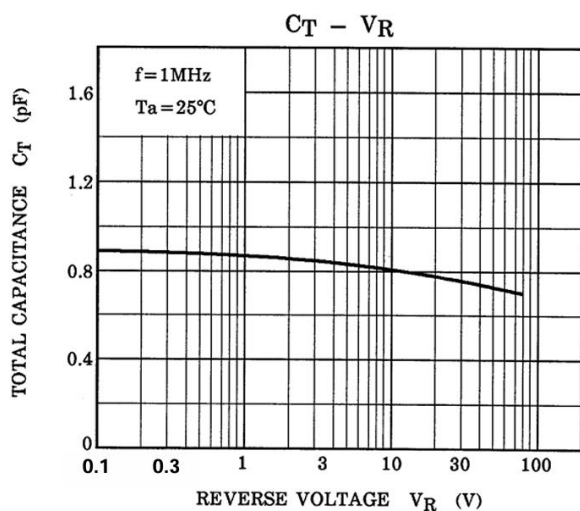
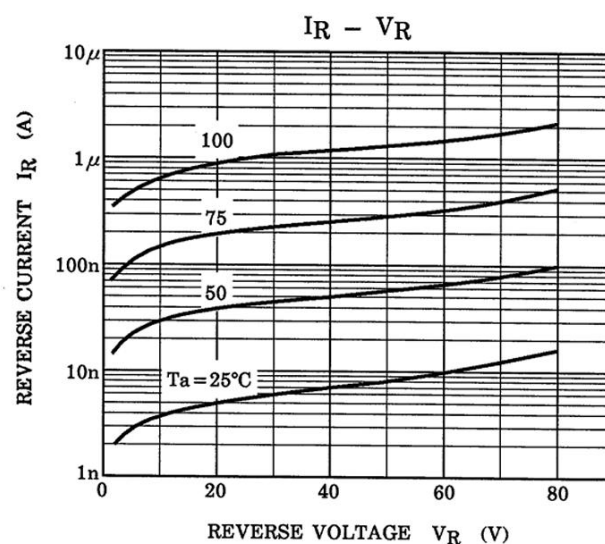
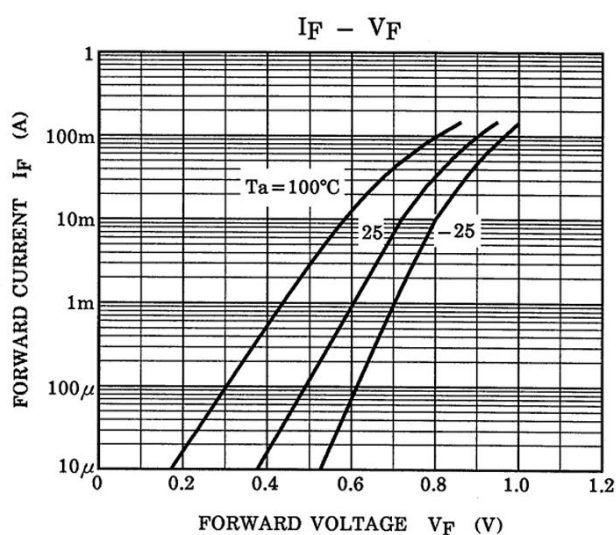
Symbol	Parameter	Condition	Min	Typ	Max	Unit
V_F	Forward Voltage	$I_F = 100 \text{ mA}$			1.2	V
I_R	Reverse Current	$V_R = 80 \text{ V}$			0.5	μA
C_T	Total Capacitance	$V_R = 0, f = 1 \text{ MHz}$			3	pF
t_{rr}	Reverse Recovery Time	$I_F = 10 \text{ mA}$			4	ns



Reverse recovery time (t_{rr}) test circuit



Typical Characteristics





Package Information

SOT-23

Dimensions in mm

