LITE-ON SEMICONDUCTORS

1SS370

SURFACE MOUNT
FAST SWITCHING DIODE

REVERSE VOLTAGE – 200 Volts
FORWARD CURRENT – 0.1 Ampere

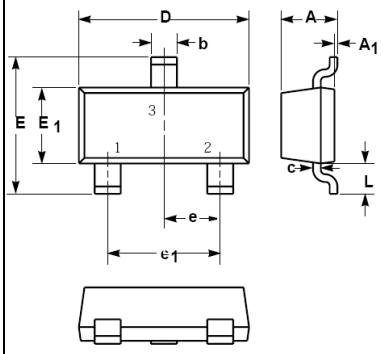
FEATURES

- Fast Switching Speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-323 Plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant

SOT-323



SOT-323		
Dim.	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
b	0.20	0.40
c	0.08	0.15
D	2.00	2.20
E	2.15	2.45
E1	1.15	1.35
e	0.65 Typ.	
e1	1.20	1.40
L	0.525 Ref.	
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	1SS370	Units
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
DC Blocking Voltage	V_R	200	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	100	mA
Repetitive Peak Forward Current @t=10ms	I_{FSM}	2	A
Operating Temperature Range	T_J	150	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Maximum Forward Voltage	I_F = 10mA I_F = 100mA	V_F	-- --	-- --	1 1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 50V V_R = 200V	I_R	-- --	-- --	0.1 1	uA
Typical Diode Capacitance	V_R =0V,f=1MHz	C_D	--	--	3	pF
Reverse Recovery time	Irr=1mA, I_F=I_R=10mA, V_R =6V	trr	--	60	--	nS

RATING AND CHARACTERISTIC CURVES
1SS370

Fig.1 Typical Forward Characteristics

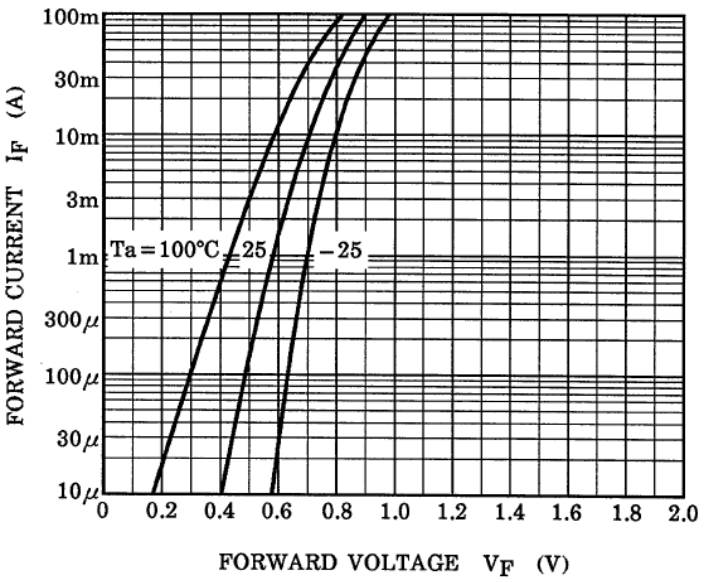


Fig.2 Typical Reverse Characteristics

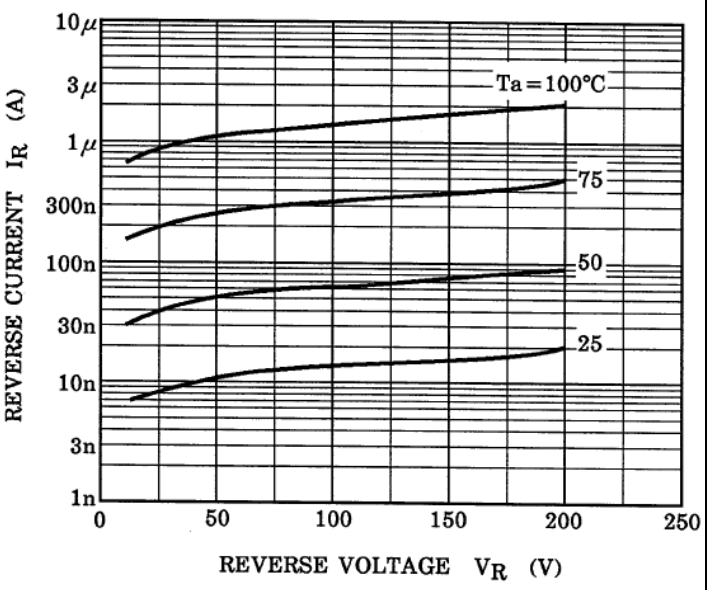


Fig.3 Total Capacitance vs. Reverse Voltage

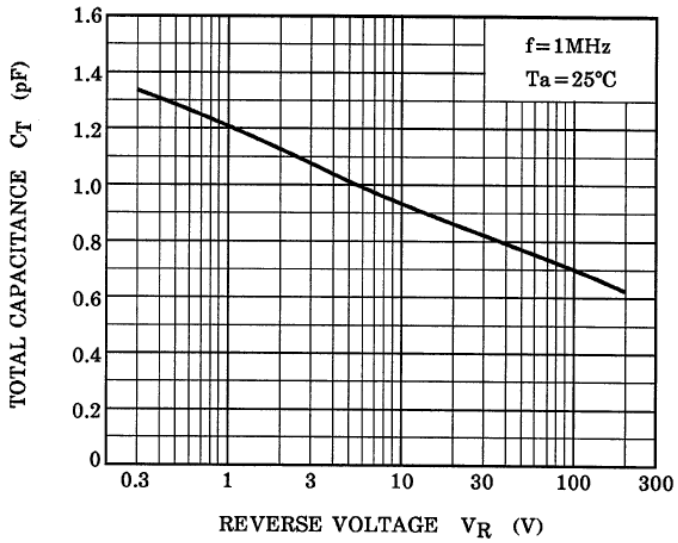


Fig.4 Reverse Recovery Time vs. Forward Current

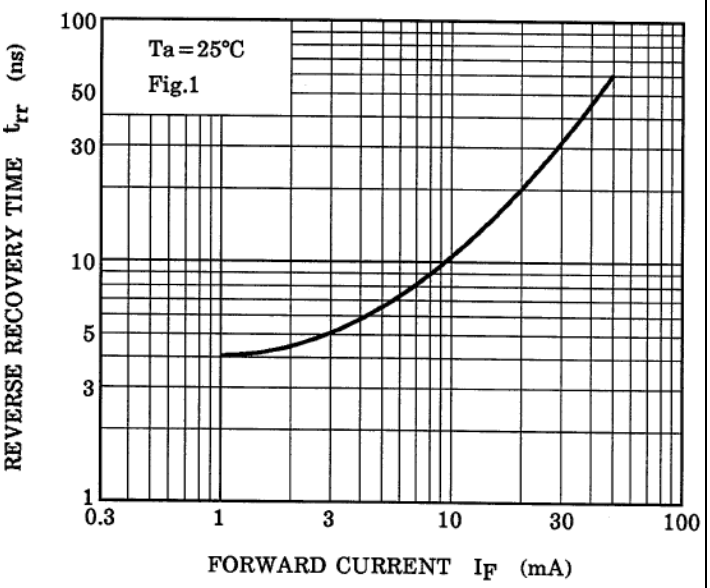
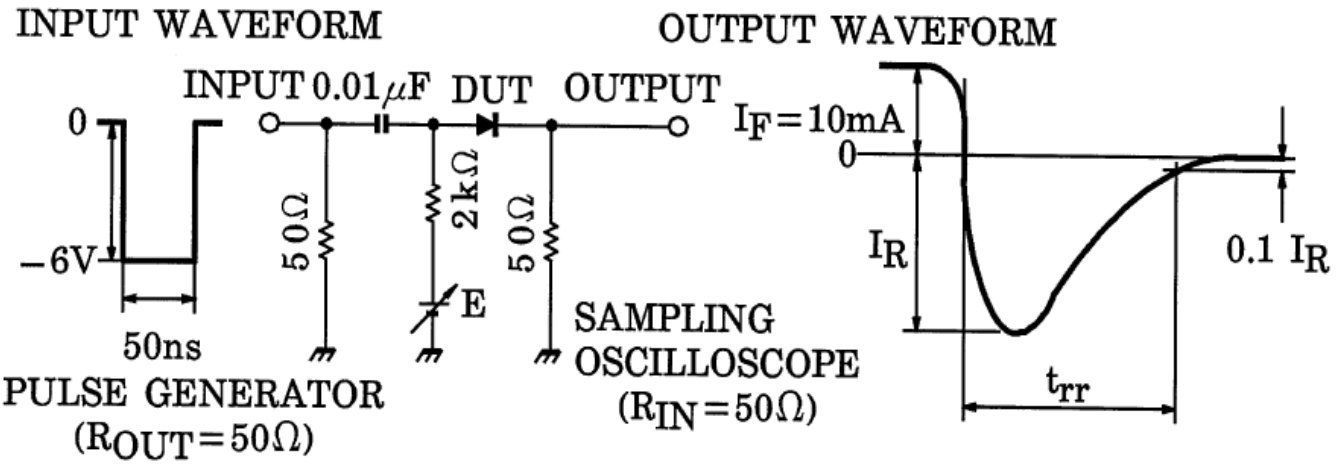


Fig.5 Reverse Recovery Time (trr) Test Circuit



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
1SS370	F5	

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