LITE-ON SEMICONDUCTORS

1SS355

SURFACE MOUNT
FAST SWITCHING DIODE

REVERSE VOLTAGE – 80 Volts
FORWARD CURRENT – 0.1 Ampere

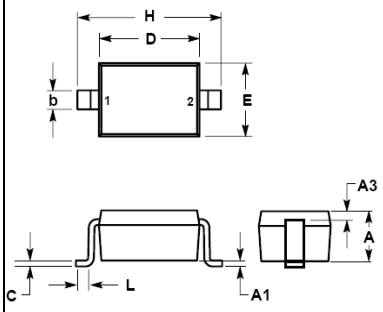
FEATURES

- Fast switching speed
- Low reverse leakage current

MECHANICAL DATA

- Case: SOD-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

SOD-323



SOD-323		
Dim.	Min.	Max.
A	0.80	1.00
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.089	0.177
D	1.60	1.80
E	1.15	1.35
L	0.08	---
H	2.30	2.70
Dimensions in millimeter		

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

Characteristic	Symbol	1SS355	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	90	V
DC Blocking Voltage	V_R	80	V
Forward Continuous Current	I_{FM}	225	mA
Average Rectified Output Current	I_O	100	mA
Peak Forward Surge Current @t=1s	I_{FSM}	0.5	A
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-55~+150	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	1SS355	Unit
Maximum Forward Voltage	I_F = 100mA	V_F	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 80V	I_R	0.1	uA
Typical Diode Capacitance	V_R =0V,f=1MHz	C_D	3	pF
Reverse Recovery time	V_R=6V, I_R=I_F=10mA R_L=100Ω	trr	4	ns

REV. 3, Jul-2013, KSYR12

RATING AND CHARACTERISTIC CURVES
1SS355

Fig.1 Typical Forward Characteristics

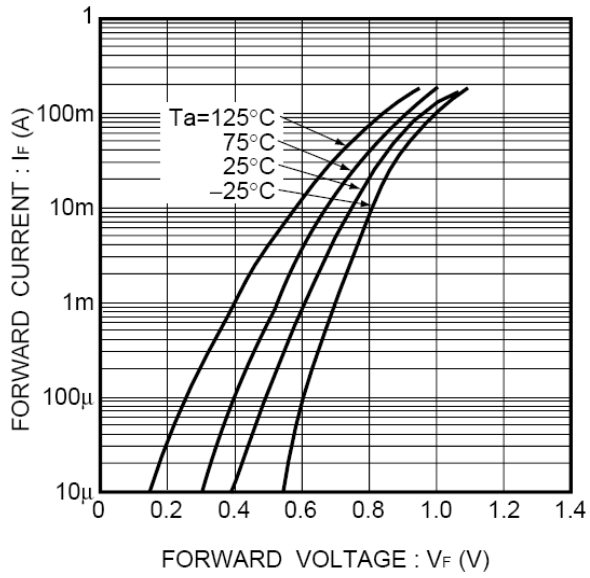


Fig.2 Typical Reverse Characteristics

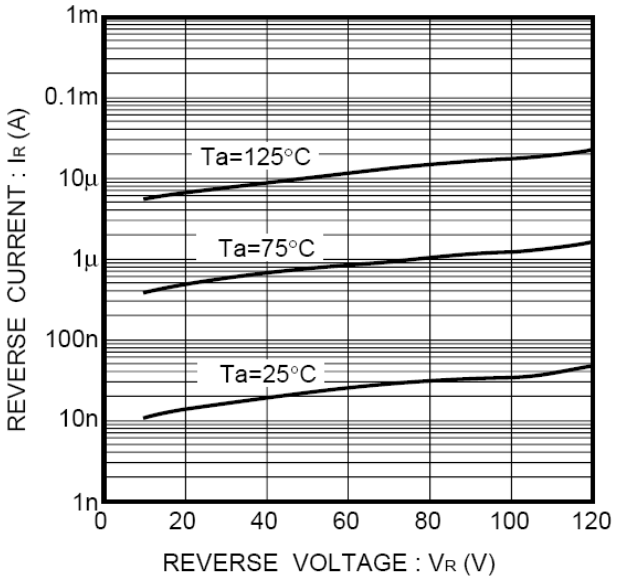


Fig.3 Total Capacitance vs. Reverse Voltage

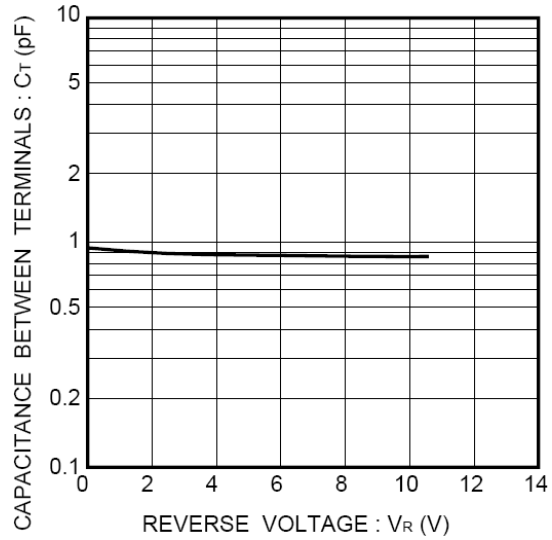


Fig.4 Reverse Recovery Time vs. Forward Current

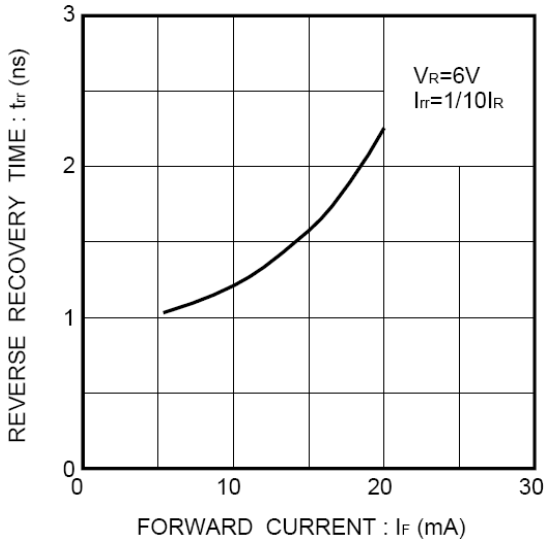


Fig.5 Surge Current Characteristics

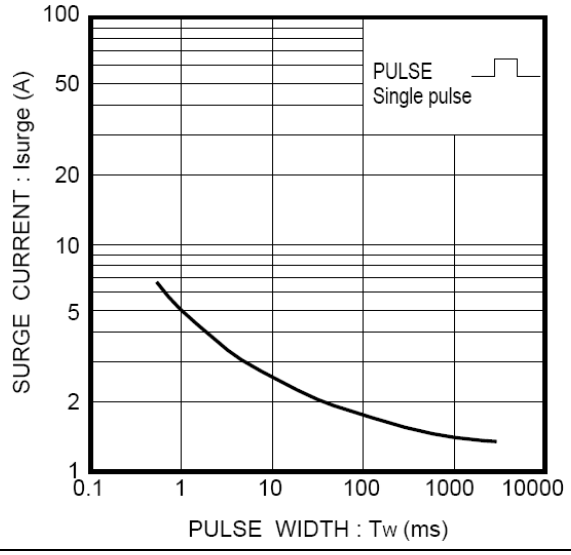
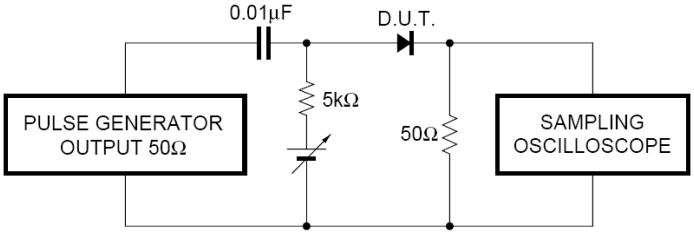


Fig.6 Reverse recovery time (trr) measurement circuit



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
1SS355	5D	

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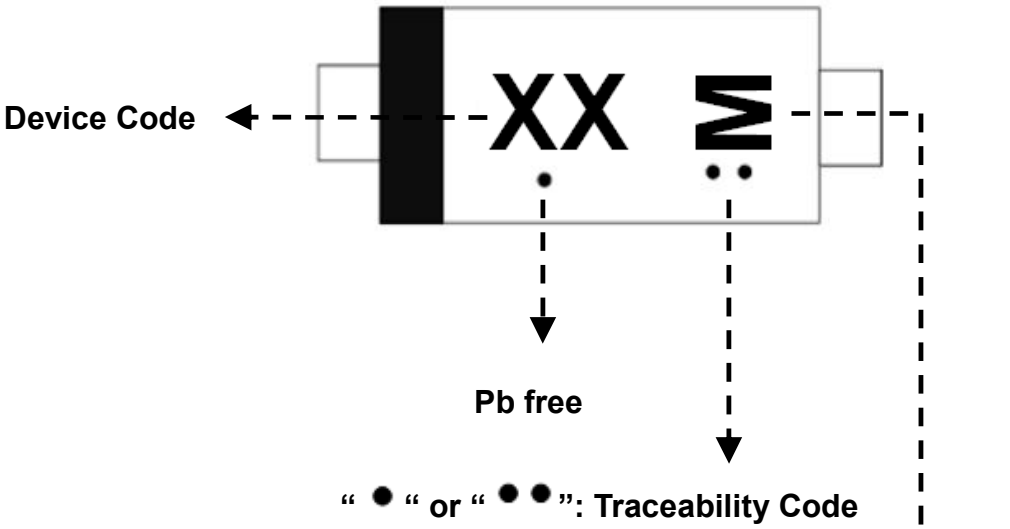
New Marking Rule Notification

Range: In order to have well management in process control, the new marking rule is applied to small signal device including Switching Diode, Transistor and Schottky Diode.

Package: SOD-123 / SOD-323 / SOD-523



Odd Year	Even Year
1	E
2	F
3	H
4	J
5	K
6	L
7	N
8	P
9	U
T	X
V	Y
C	Z