SSC1N4148D1

Fast Switching Diode

● Features

- ✧ Fast Switching Speed
- ✧ Ultra-Small Surface Mount Package
- ✧ Low Reverse Leakage Current
- ✧ Ideal for Battery Powered Portable Applications
- ✧ RoHS Compliant/Green EMC
- ✧ Moisture Sensitivity: Level 3 per J-STD-020

● PIN configuration

SOD-123

Circuit Diagram

● Applications

- ✧ High speed switching for detection
- ✧ Battery Powered Portable
- ✧ Mobile phones, laptops and other electronic devices

Marking(Top View)

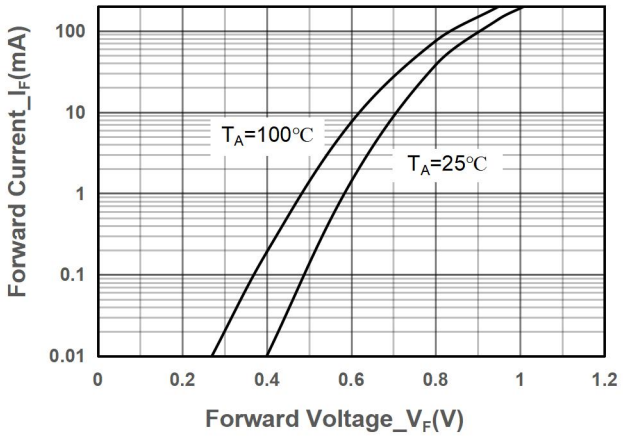
● Absolute maximum rating @T_A=25℃

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Repetitive Peak Reverse Voltage Working Peak Reverse Voltage Reverse Voltage(DC)	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	V_{RMS}	71	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Forward Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	500	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	150	℃/W
Operating Temperature	T_J	-55 ~ +150	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

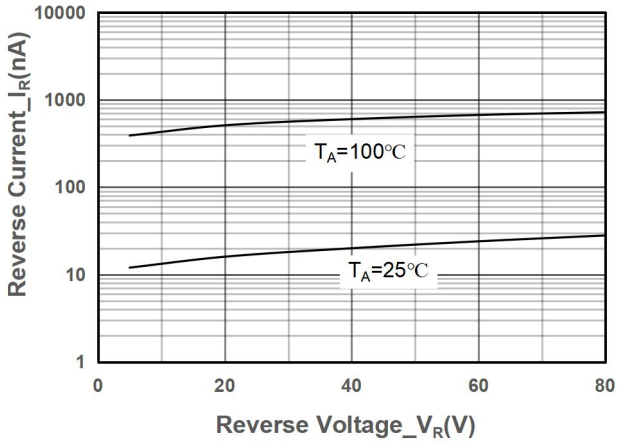
Electrical Characteristics @T_A=25℃

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_{R1}	I_R = 100μA	100			V
Forward Voltage	V_F	I_F = 1mA			0.715	V
		I_F = 10mA			0.855	
		I_F = 50mA			1	
		I_F = 150mA			1.25	
Reverse Current	I_R	V_R = 20V			25	nA
		V_R = 75V			1	μA
Total Capacitance	C_T	V_R = 0,f = 1MHz			2	pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 10mA, I_{rr} = 0.1 x I_R, R_L = 100Ω			4	ns

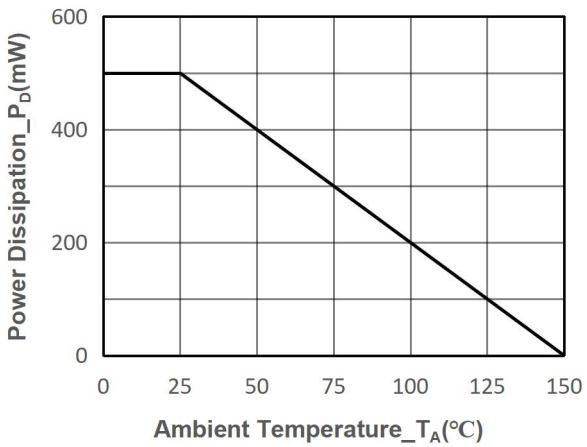
Typical Performance Characteristics



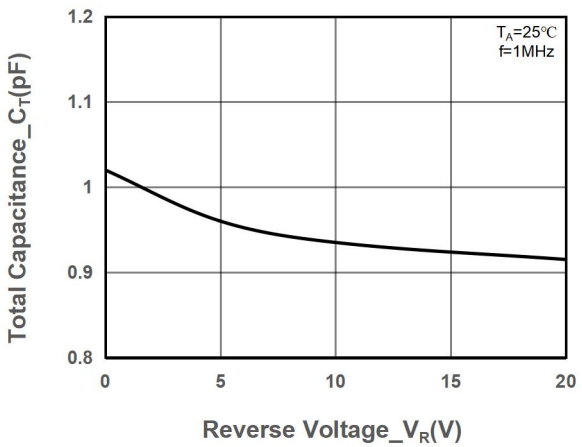
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage

● Package Information

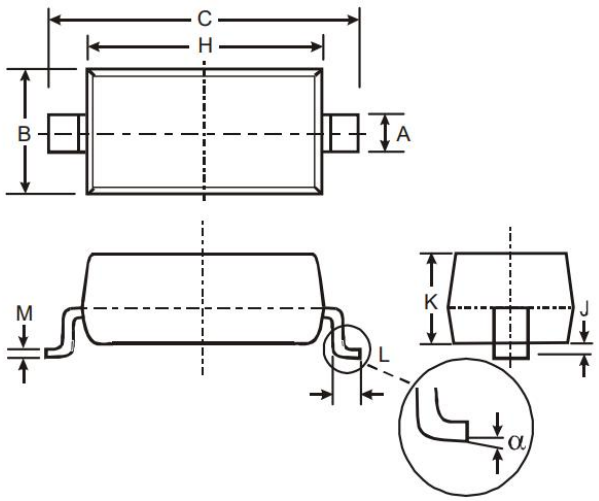
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC1N4148D1	SOD-123	T4	3000	7 Inch

Mechanical Data

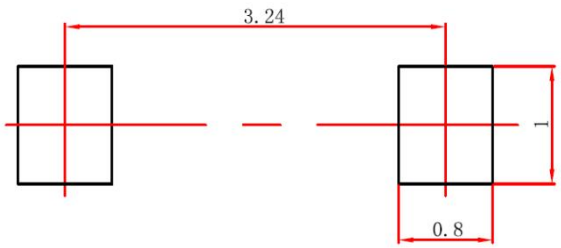
Case: SOD-123

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.45	0.65
B	1.50	1.70
C	3.55	3.85
H	2.6	2.8
J	0.00	0.10
K	1.05	1.15
L	0.25	0.45
M	0.08	0.15
α	0	8°

Recommended Pad outline（Unit:mm）



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