



SSC1N4148D3

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-523



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°C

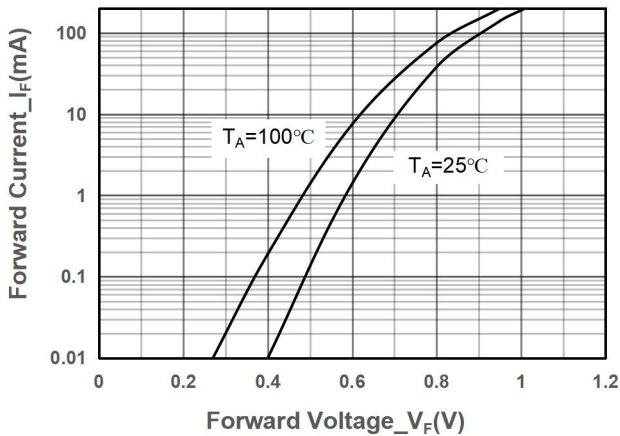
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
Reverse Voltage(DC)	V _R		
RMS Reverse Voltage	V _{RMS}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Forward Current	I _o	150	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	833	°C/W
Operating Temperature	T _J	-55 ~ +150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C



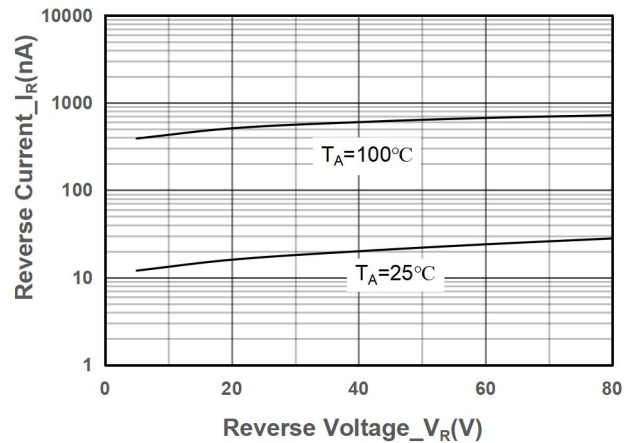
Electrical Characteristics @ $T_A=25^\circ\text{C}$

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

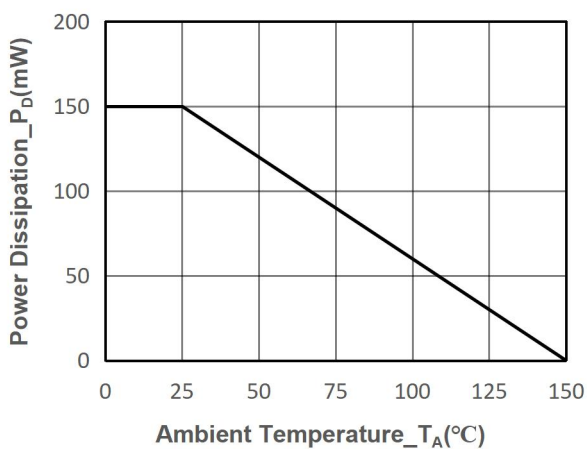
Typical Performance Characteristics



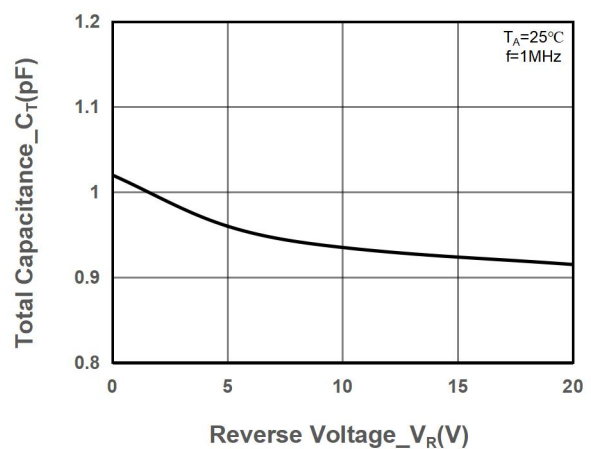
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage



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● Package Information

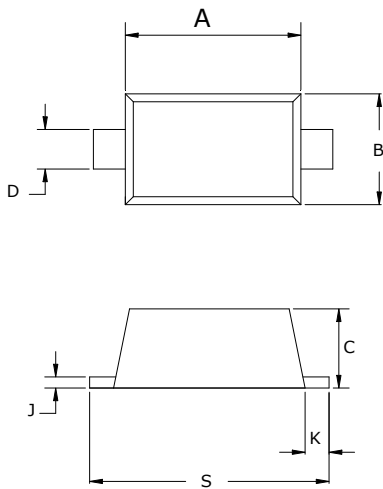
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC1N4148D3	SOD-523	T4	3000	7 Inch

Mechanical Data

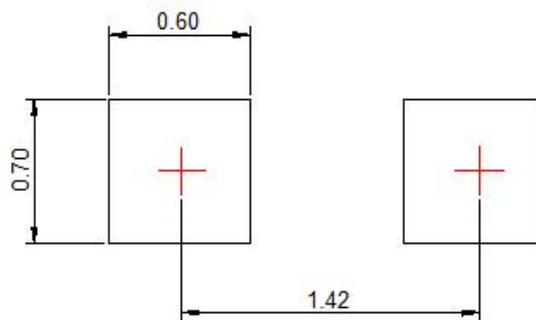
Case: SOD-523

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	1.10	1.30
B	0.75	0.85
C	0.51	0.70
D	0.25	0.35
J	0.08	0.15
K	0.15	0.25
S	1.50	1.70

Recommended Pad outline (Unit:mm)





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