



SSC1N4148N1

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

● PIN configuration



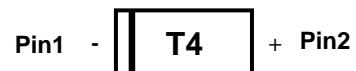
DFN1006-2L(Bottom View)



Circuit Diagram

● Applications

- ◊ High speed switching for detection
- ◊ Battery Powered Portable
- ◊ Mobile phone, Note book PC



Marking(Top View)

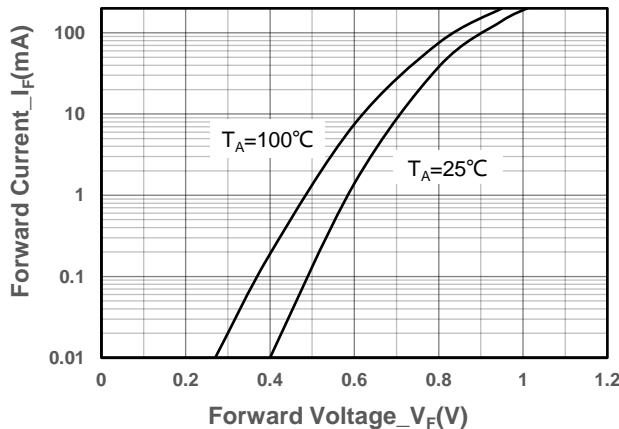
● Absolute maximum rating @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	75	V
Reverse Voltage(DC)	V_R		
RMS Reverse Voltage	V_{RMS}	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Forward Current	I_o	200	mA
Non-Repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Operating Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

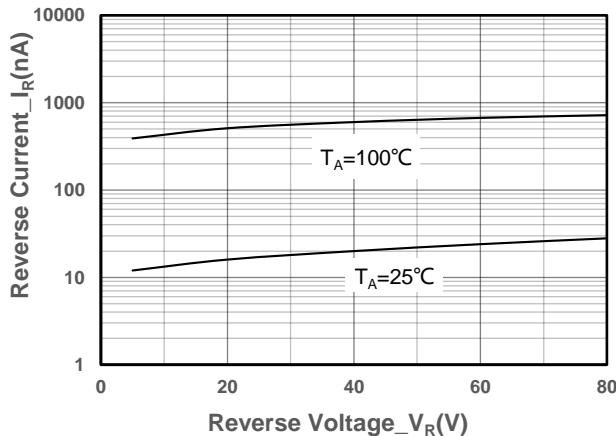
- **Electrical Characteristics @ $T_A=25^\circ C$**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_{R1}	$I_R = 100\mu A$	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}	$I_F=10mA, V_R=6V, R_L=100\Omega, I_{rr}=1mA$			4	ns

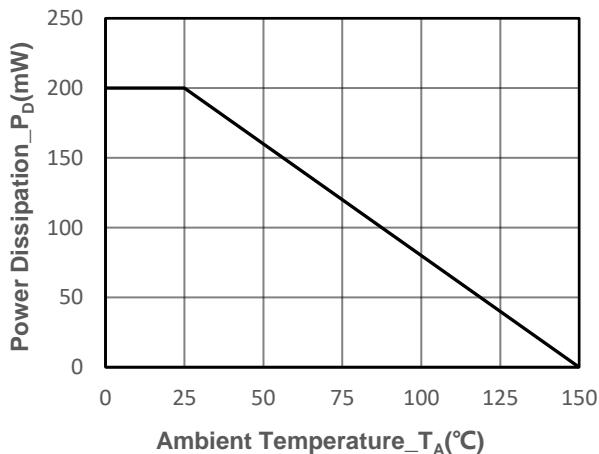
- **Typical Performance Characteristics**



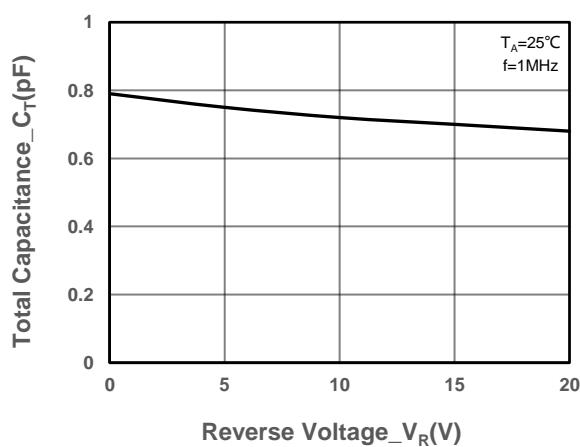
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage

- Package Information**

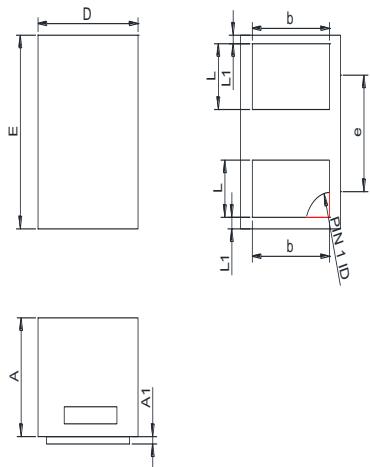
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC1N4148N1	DFN1006-2L	T4	10000	7 Inch

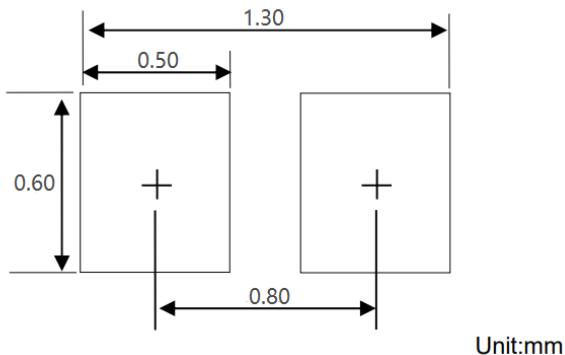
Mechanical Data

Case: DFN1006-2L

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.45	0.55
A1	0.00	0.05
D	0.55	0.65
E	0.95	1.05
b	0.45	0.60
e	0.65TYP	
L	0.2	0.3
L1	0.05REF	

Recommended Pad outline


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