



## 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



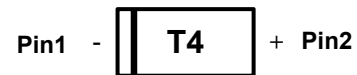
**DFN1006-2L(Bottom View)**



**Circuit Diagram**

#### ● Applications

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



**Marking(Top View)**

#### ● Absolute maximum rating @T<sub>A</sub>=25°C

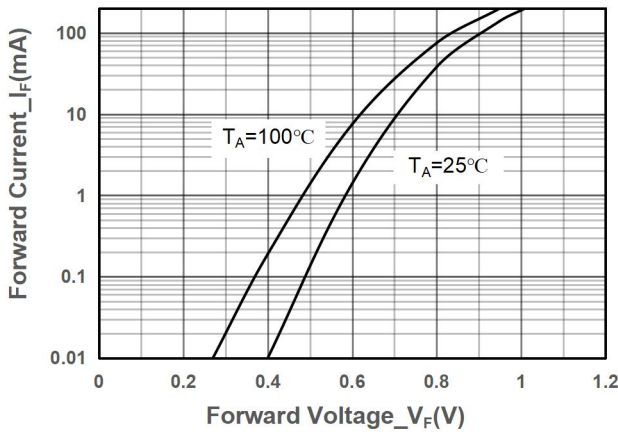
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Repetitive Peak Reverse Voltage	V <sub>RPM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
Reverse Voltage(DC)	V <sub>R</sub>	53	V
RMS Reverse Voltage	V <sub>RMS</sub>		
Forward Continuous Current	I <sub>FM</sub>	500	mA
Average Rectified Forward Current	I <sub>o</sub>	200	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I <sub>FSM</sub>	1	A
Power Dissipation	P <sub>D</sub>	200	mW
Operating Temperature	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C



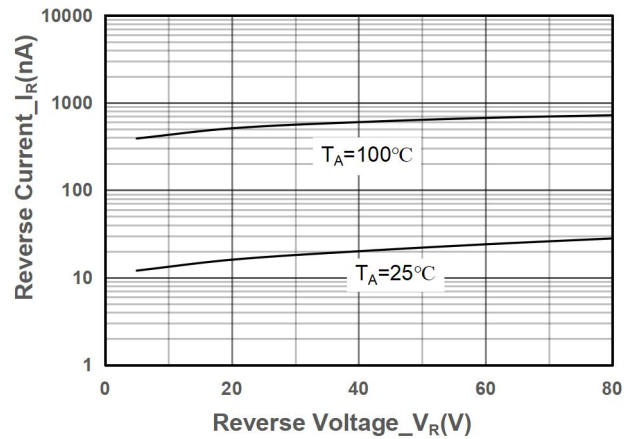
## Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V <sub>R1</sub>	I <sub>R</sub> = 100μA	100			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1mA			0.715	V
		I <sub>F</sub> = 10mA			0.855	
		I <sub>F</sub> = 50mA			1	
		I <sub>F</sub> = 150mA			1.25	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 20V			25	nA
		V <sub>R</sub> = 75V			1	μA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1MHz			2	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =100Ω, I <sub>rr</sub> =1mA			4	ns

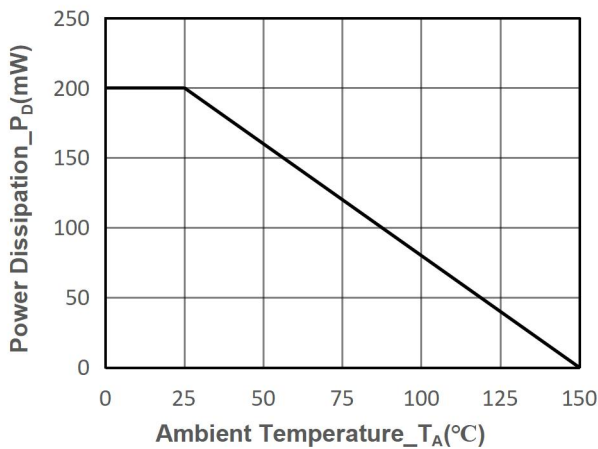
## Typical Performance Characteristics



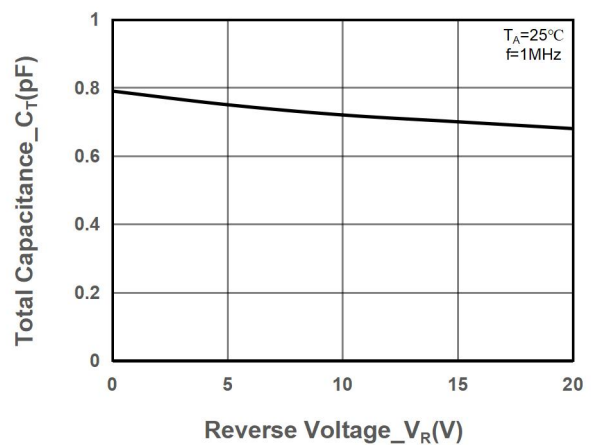
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage



## ● Package Information

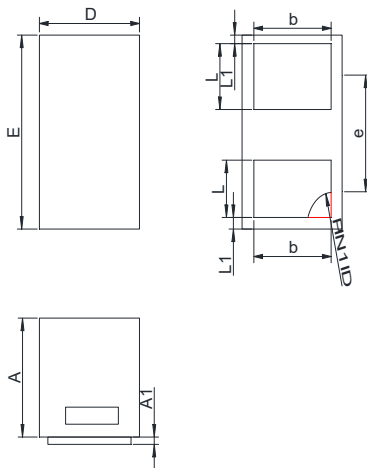
### Ordering Information

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

### Mechanical Data

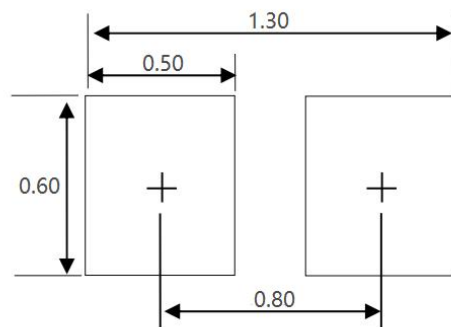
Case: DFN1006-2L

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



Unit:mm



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