



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

● Applications

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

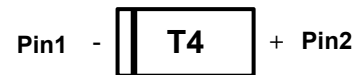
● PIN configuration



DFN1006-2L(Bottom View)



Circuit Diagram



Marking(Top View)

● Absolute maximum rating @T_A=25°C

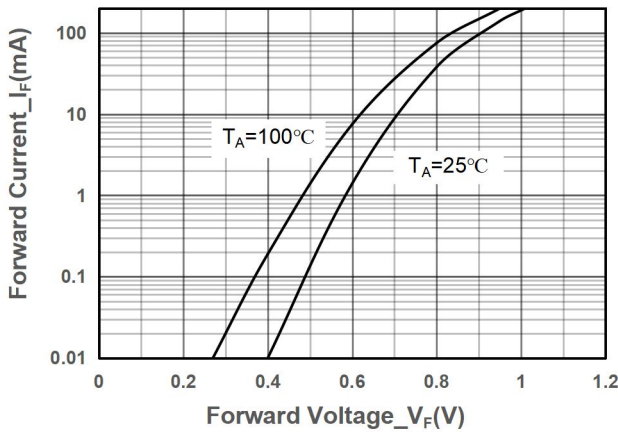
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Repetitive Peak Reverse Voltage	V _{R RM}		
Working Peak Reverse Voltage	V _{R WM}	75	V
Reverse Voltage(DC)	V _R		
RMS Reverse Voltage	V _{R MS}	53	V
Forward Continuous Current	I _{F M}	500	mA
Average Rectified Forward Current	I _o	200	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{F SM}	1	A
Power Dissipation	P _D	200	mW
Operating Temperature	T _J	-55 ~ +150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C



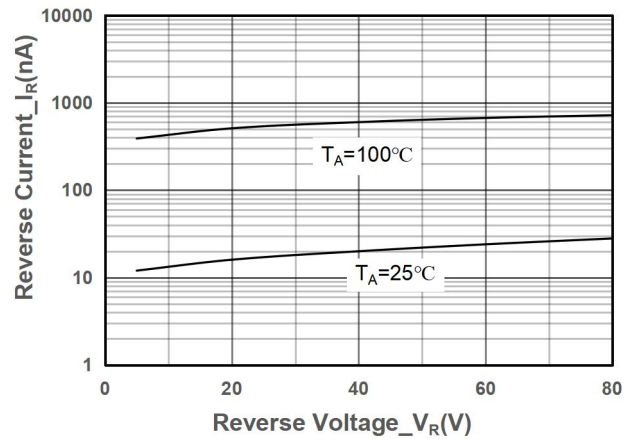
● Electrical Characteristics @ $T_A=25^\circ\text{C}$

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}	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega, I_{rr}=1\text{mA}$			4	ns

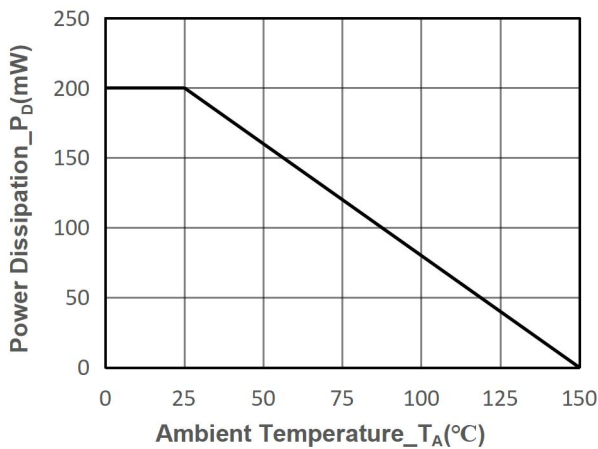
● Typical Performance Characteristics



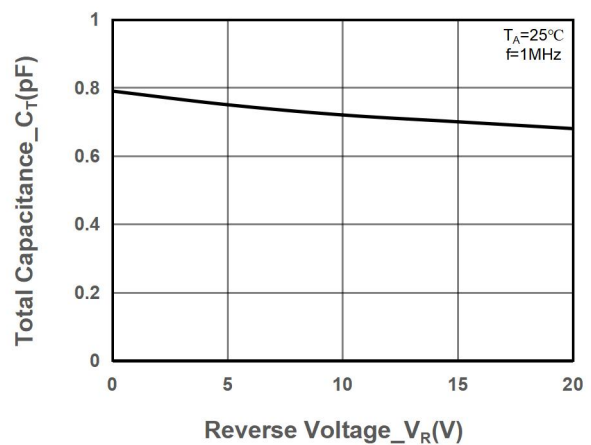
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage



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● Package Information

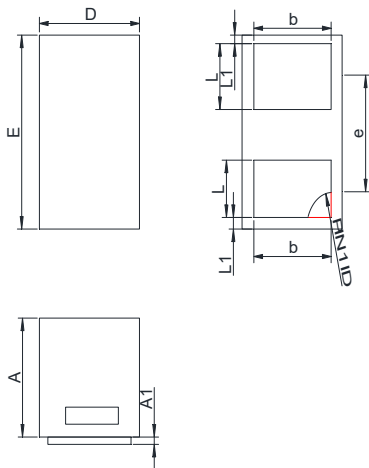
Ordering Information

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

Mechanical Data

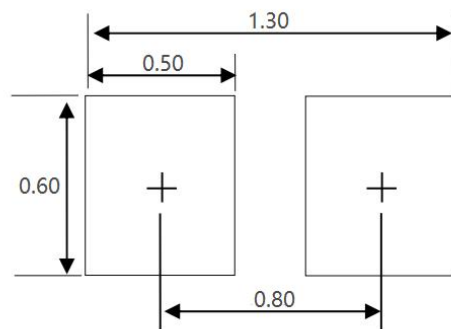
Case: DFN1006-2L

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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