



SSC1N4448N1

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



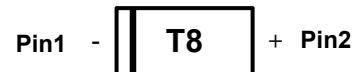
DFN1006-2L(Bottom View)



Circuit Diagram

● Applications

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



Marking(Top View)

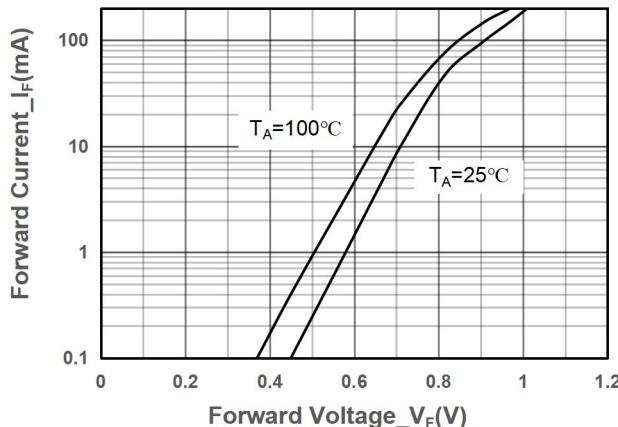
● Absolute maximum rating @ $T_A=25^\circ\text{C}$

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}	80	V
Reverse Voltage(DC)	V_R		
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}	1	A
Power Dissipation	P_D	150	mW
Operating Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

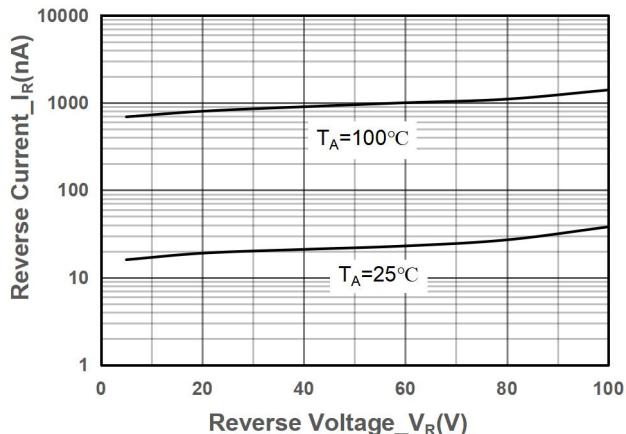
- **Electrical Characteristics @ $T_A=25^\circ\text{C}$**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_R	$I_R = 100\mu\text{A}$	80			V
Forward Voltage	V_F	$I_F = 5\text{mA}$			0.7	V
		$I_F = 10\text{mA}$			0.8	
		$I_F = 100\text{mA}$			1.0	
		$I_F = 150\text{mA}$			1.2	
Reverse Current	I_R	$V_R = 20\text{V}$			25	nA
		$V_R = 80\text{V}$			1	μA
Total Capacitance	C_T	$V_R = 0, f = 1\text{MHz}$			3	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$			4	ns

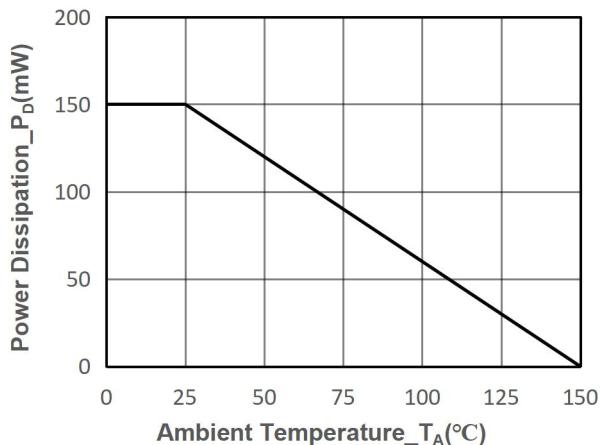
- **Typical Performance Characteristics**



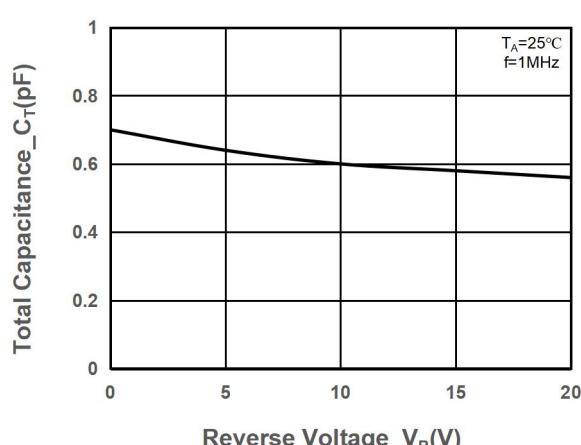
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage

- Package Information**

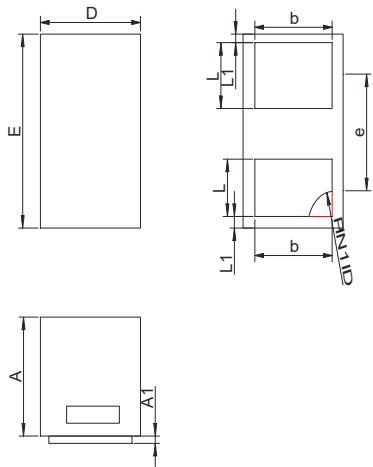
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC1N4448N1	DFN1006-2L	T8	10000	7 Inch

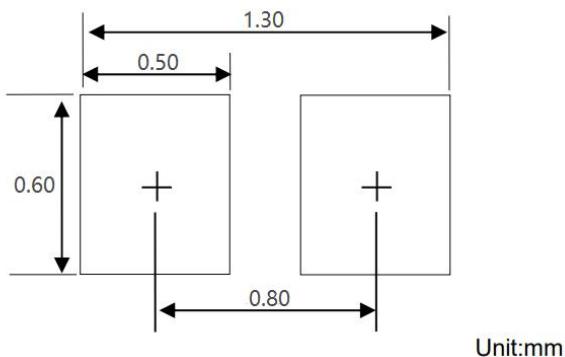
Mechanical Data

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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