



SSCS40101N1

Schottky Barrier Diode

● Features

- ❖ Small Surface Mounting Type
- ❖ Ideal for Automated Placement
- ❖ Ultrafast Reverse Recovery Time
- ❖ Low Power Losses, High Efficiency
- ❖ Low Forward Voltage Drop
- ❖ High Surge Capability
- ❖ RoHS Compliant

● PIN configuration



DFN1006-2L(Bottom View)



Circuit Diagram

● Applications

- ❖ Low Voltage
- ❖ High-Frequency Inverters
- ❖ Free Wheeling
- ❖ Polarity Protection



Marking(Top View)

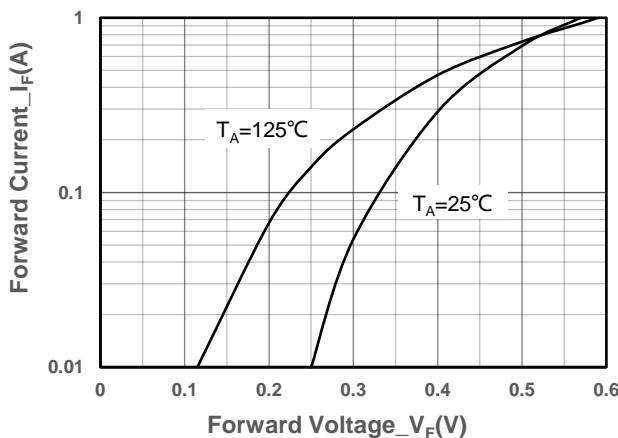
● Absolute maximum rating @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage(Repetitive Peak)	V_{RRM}	40	V
Reverse Voltage(RMS)	$V_{R(\text{RMS})}$	32	V
DC Blocking Voltage	V_R	40	V
Average Rectified Forward Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	I_{FSM}	8	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient(Typ)	$R_{\theta JA}$	120	°C/W
Operating Temperature	T_J	55 ~ +125	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

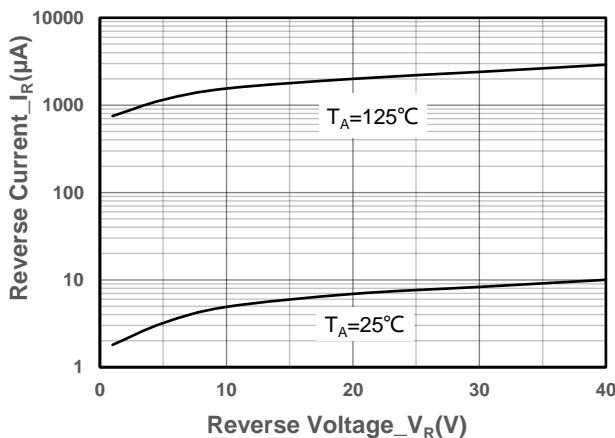
- **Electrical Characteristics @ $T_A=25^\circ\text{C}$**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Breakdown Voltage	V_{BR}	$I_R = 1\text{mA}$	40			V
Reverse Current	I_R	$V_R = 40\text{V}$		10	40	μA
Forward Voltage	V_F	$I_F = 100\text{mA}$			0.38	V
		$I_F = 200\text{mA}$			0.40	
		$I_F = 500\text{mA}$			0.49	
		$I_F = 700\text{mA}$			0.55	
		$I_F = 1\text{A}$			0.61	
Total Capacitance	C_T	$V_R = 0\text{V}, f = 1\text{MHz}$		75	120	pF

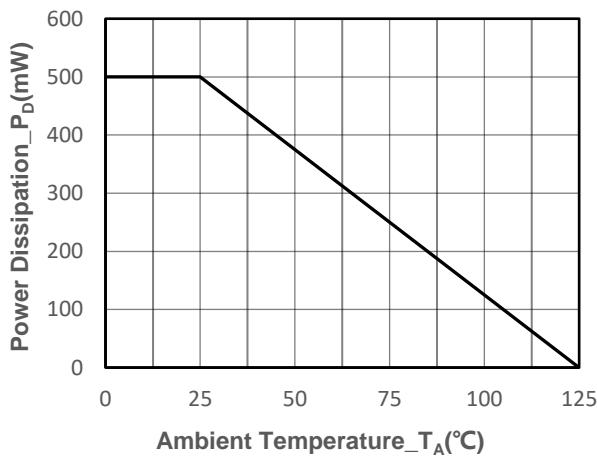
- **Typical Performance Characteristics**



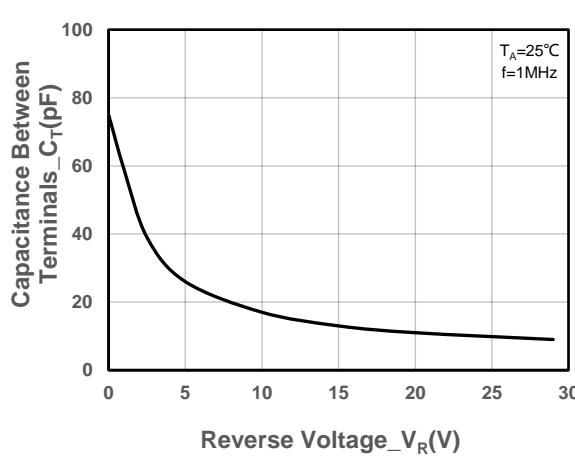
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage

- Package Information**

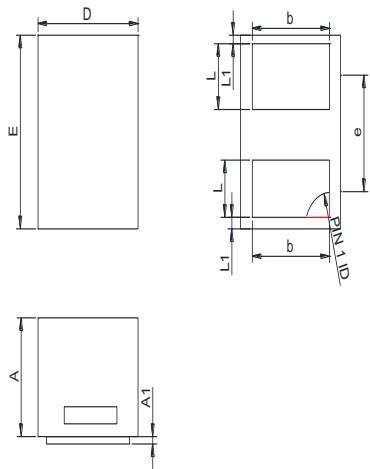
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS40101N1	DFN1006-2L	40	10000	7 Inch

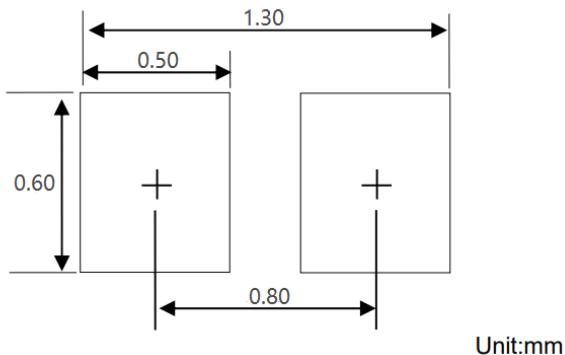
Mechanical Data

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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