



## 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

#### ● Applications

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

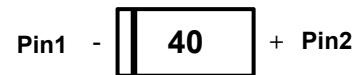
#### ● PIN configuration



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



**Circuit Diagram**



**Marking(Top View)**

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

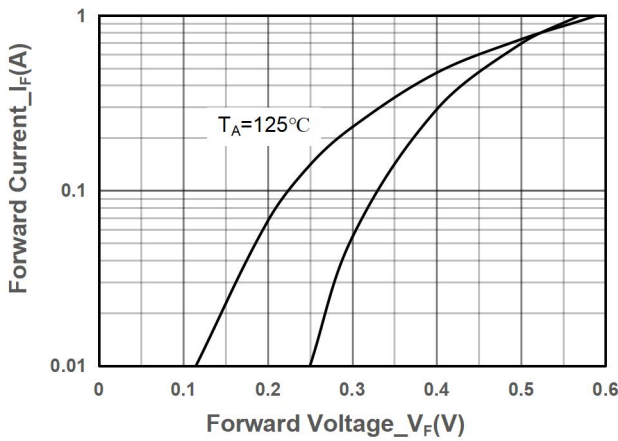
Parameter	Symbol	Value	Unit
Reverse Voltage(Repetitive Peak)	V <sub>R(RM)</sub>	40	V
Reverse Voltage(RMS)	V <sub>R(RMS)</sub>	32	V
DC Blocking Voltage	V <sub>R</sub>	40	V
Average Rectified Forward Current	I <sub>o</sub>	1	A
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I <sub>FSM</sub>	8	A
Power Dissipation	P <sub>D</sub>	500	mW
Thermal Resistance Junction to Ambient(Typ)	R <sub>θJA</sub>	120	°C/W
Operating Temperature	T <sub>J</sub>	55 ~ +125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C



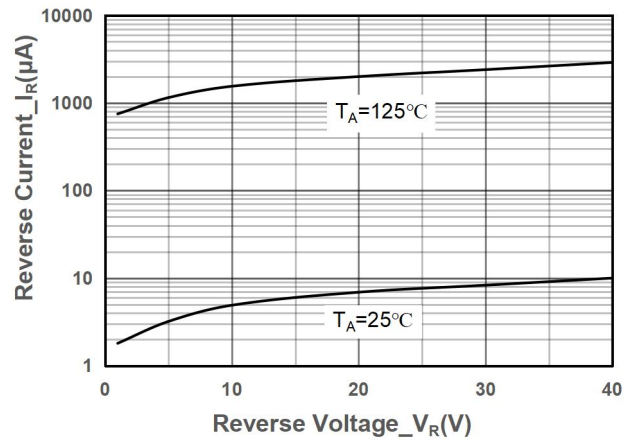
● **Electrical Characteristics @ $T_A=25^{\circ}\text{C}$**

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	$\mu\text{A}$
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

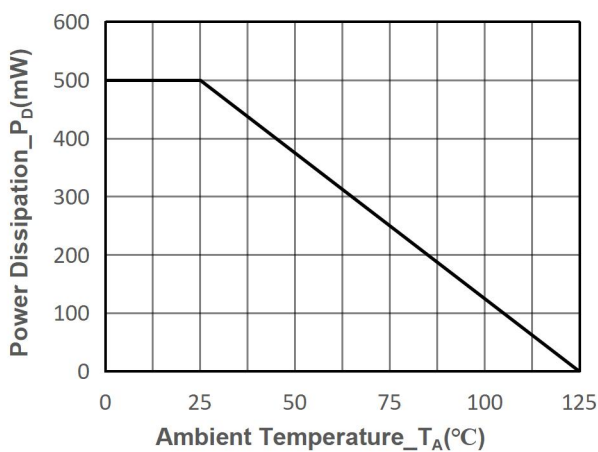
● **Typical Performance Characteristics**



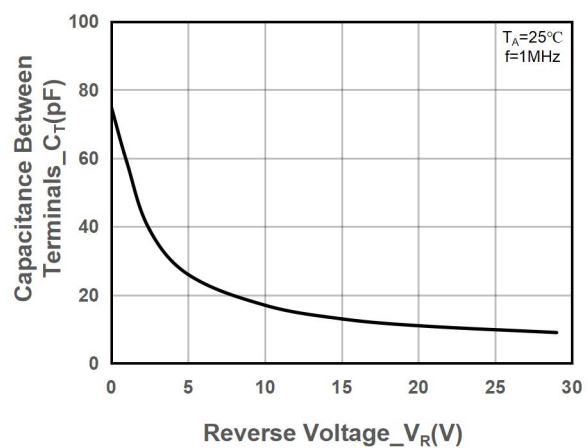
**Forward Voltage vs. Forward Current**



**Reverse Voltage vs. Reverse Current**



**Power Derating vs. Ambient Temperature**



**Total Capacitance vs. Reverse Voltage**



## ● Package Information

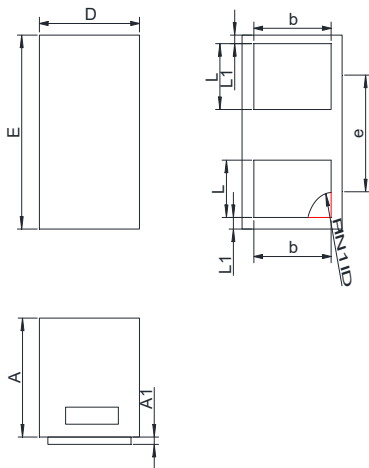
### Ordering Information

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

### Mechanical Data

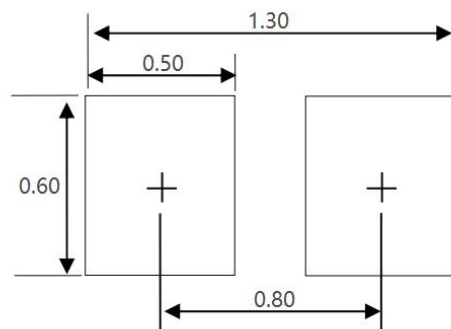
Case: DFN1006-2L

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



Unit:mm



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