

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)





• Absolute maximum rating @T_A=25℃

Parameter	Symbol	Value	Unit
Reverse Voltage(Repetitive Peak)	V_{RRM}	40	V
Reverse Voltage(RMS)	V _{R(RMS)}	32	V
DC Blocking Voltage	V _R	40	V
Average Rectified Forward Current	lo	1	Α
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{FSM}	5	Α
Power Dissipation	P _D	500	mW
Thermal Resistance Junction to Ambient(Typ)	R _{θJA}	250	°C/W
Operating Temperature	TJ	55 ~ +125	$^{\circ}$
Storage Temperature	T _{STG}	-55 ~ +150	$^{\circ}$

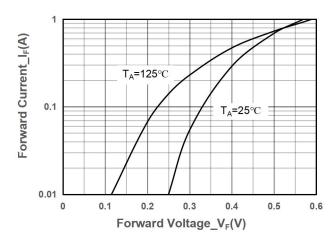


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• Electrical Characteristics @T_A=25℃

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Breakdown Voltage	V_{BR}	I _R = 1mA	40			V
Reverse Current	I _R	V _R = 40V		10	40	μA
		I _F = 100mA			0.38	
		I _F = 200mA			0.40	
Forward Voltage	V _F	I _F = 500mA			0.49	V
		I _F = 700mA			0.55	
		I _F = 1A			0.61	
Total Capacitance	Ст	V _R = 0V,f = 1MHz		75	120	pF

• Typical Performance Characteristics



10000

(Yn)

1000

T_A=125°C

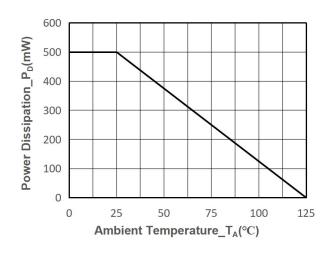
T_A=25°C

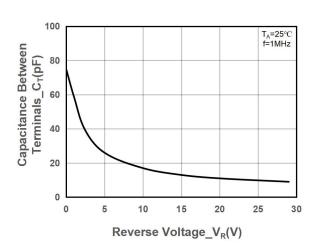
1000

Reverse Voltage_V_R(V)

Forward Voltage vs. Forward Current

Reverse Voltage vs. Reverse Current





Power Derating vs. Ambient Temperature

Total Capacitance vs. Reverse Voltage



Package Information

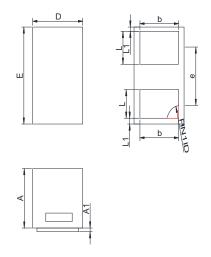
Ordering Information

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

Mechanical Data

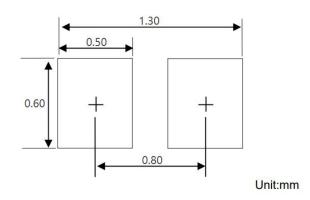
Case: DFN1006-2L

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		
DIIVI	Min	Max	
Α	0.45	0.55	
A1	0.00	0.05	
D	0.55	0.65	
E	0.95	1.05	
b	0.45	0.60	
е	0.65TYP		
L	0.2	0.3	
L1	0.05REF		

Recommended Pad outline





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