

# SSCS40101L6

# SSCS40101L6 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

Free Wheeling

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- ♦ UL Flammability Classification Rating 94V-0
- ♦ Moisture Sensitivity: Level 3 per J-STD-020



**PIN** configuration

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DFN1608-2L



**Circuit Diagram** 



## ♦ Polarity Protection

High-Frequency Inverters

♦ Switching circuit

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

Parameter	Symbol	Value	Unit
Reverse Voltage(Repetitive Peak)	V <sub>RRM</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	lo	1.5	A
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I <sub>FSM</sub>	5	A
Power Dissipation	PD	410	mW
Thermal Resistance Junction to Ambient(Typ)	R <sub>θJA</sub>	305	°C/W
Operating Temperature	TJ	55 ~ +150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C

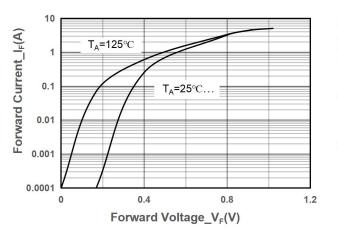


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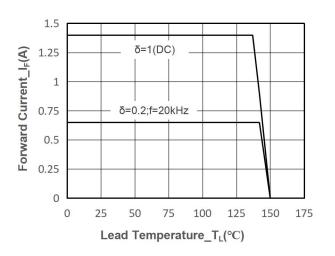
### ● Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> = 0.1mA	40			V
Reverse Current	IR	V <sub>R</sub> = 40V			20	μA
Total Capacitance	Ст	V <sub>R</sub> = 10V, f = 1MHz			25	pF
		I <sub>F</sub> = 100mA	0.345		0.39	
Forward Voltage	VF	I <sub>F</sub> = 700mA	0.48		0.55	V
		I <sub>F</sub> = 1A	0.54		0.60	

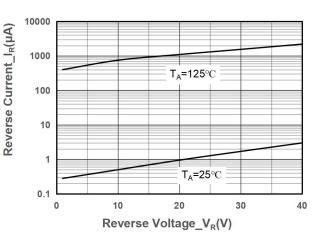
### • Typical Performance Characteristics



Forward Voltage vs. Forward Current



Power Derating vs. Lead Temperature



Reverse Voltage vs. Reverse Current



# Package Information

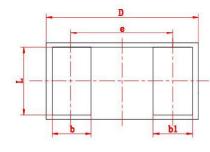
#### **Ordering Information**

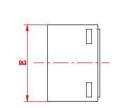
Device	Package	Marking	Qty per Reel	Reel Size
SSCS40101L6	DFN1608-2L	S3	3000	7 Inch

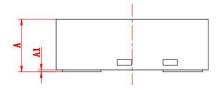
#### **Mechanical Data**

Case: DFN1608-2L

Case Material: Molded Plastic. UL Flammability

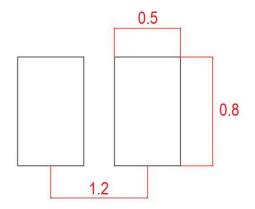






DIM	Millimeters			
	Min	Nor	Max	
Α	0.50	-	0.60	
A1	0	-	0.05	
D	1.50	-	1.70	
E	0.75	-	0.85	
е	(1.05)			
b	0.36	-	0.46	
b1	0.36	-	0.46	
L	0.66	-	0.76	

#### **Recommended Pad outline (Unit:mm)**





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