

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

• PIN configuration



DFN1608-2L



Circuit Diagram

Applications

- ♦ Low Voltage
- ♦ High-Frequency Inverters
- ♦ Free Wheeling
- ♦ Polarity Protection
- ♦ Switching circuit

Pin1 - S3 + Pin2

Marking (Top 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	Io	1.5	Α
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{FSM}	5	Α
Power Dissipation	P _D	410	mW
Thermal Resistance Junction to Ambient (Typ)	R _{0JA}	305	°C/W
Operating Temperature	TJ	-55 ~ +150	$^{\circ}$
Storage Temperature	T _{STG}	-55 ~ +150	$^{\circ}$

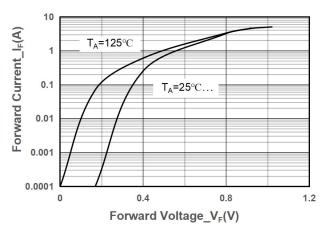


• Electrical Characteristics @T_A=25℃

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Breakdown Voltage	V_{BR}	$I_R = 0.1 \text{mA}$	40			V
Reverse Current	I _R	V _R = 40V			20	μA
Total Capacitance	Ст	V _R = 10V, f = 1MHz			25	pF
		I _F = 100mA		0.33	0.39	
Forward Voltage	V _F	I _F = 700mA		0.48	0.55	V
		I _F = 1A		0.54	0.60	

10000

• Typical Performance Characteristics



1000
T_A=125°C

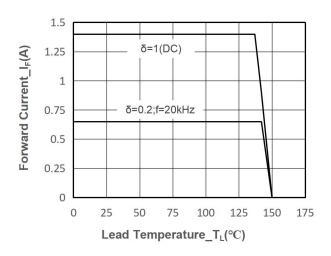
100
T_A=25°C

0.1
0 10 20 30 40

Reverse Voltage_V_R(V)

Forward Voltage vs. Forward Current

Reverse Voltage vs. Reverse Current



Power Derating vs. Lead Temperature



• Package Information

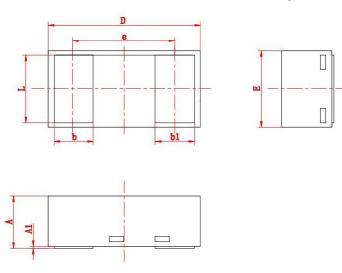
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS40101L6	DFN1608-2L	S3	10000	7 Inch

Mechanical Data

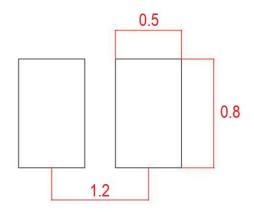
Case: DFN1608-2L

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters			
DIIVI	Min	Nor	Max	
Α	0.50	-	0.60	
A 1	0	ı	0.05	
D	1.50	-	1.70	
E	0.75	-	0.85	
Ф	(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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