



SSCS40201L6

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



DFN1608-2L



Circuit Diagram



Marking (Top View)

● Absolute maximum rating @T_A=25°C

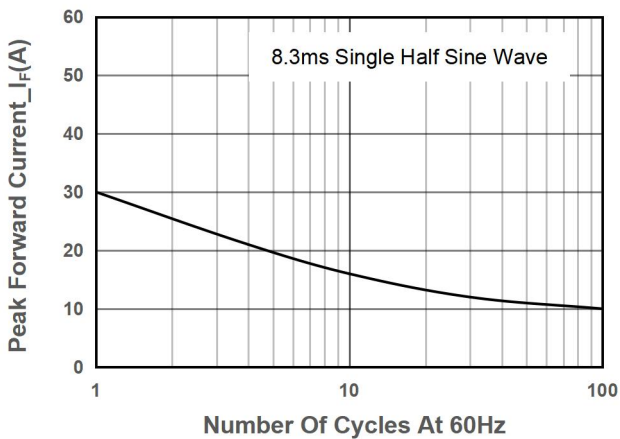
Parameter	Symbol	Value	Unit
Reverse Voltage (Repetitive Peak)	V _{RRM}	40	V
Reverse Voltage (RMS)	V _{R(RMS)}	32	V
DC Blocking Voltage	V _R	40	V
Average Rectified Forward Current	I _o	2	A
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{FSM}	30	A
Thermal Resistance Junction to Ambient (Typ.)	R _{θJA}	80	°C/W
Operating Temperature	T _J	55 ~ +150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C



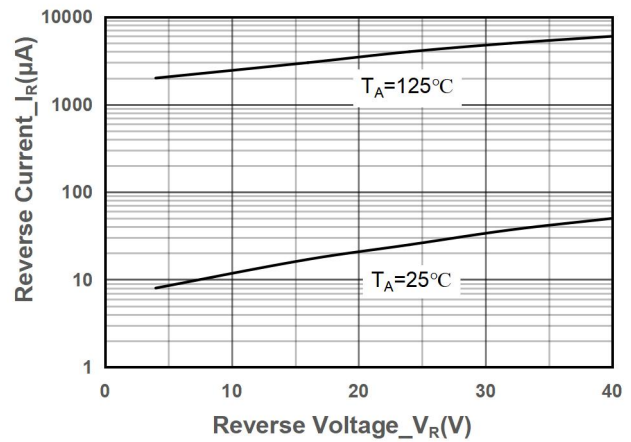
● **Electrical Characteristics @ $T_A=25^{\circ}\text{C}$**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Breakdown Voltage	V_{BR}	$I_R = 0.5\text{mA}$	40			V
Reverse Current	I_R	$V_R = 4\text{V}$			15	μA
		$V_R = 40\text{V}$			100	
Forward Voltage	V_F	$I_F = 1\text{A}$			0.47	V
		$I_F = 2\text{A}$			0.53	

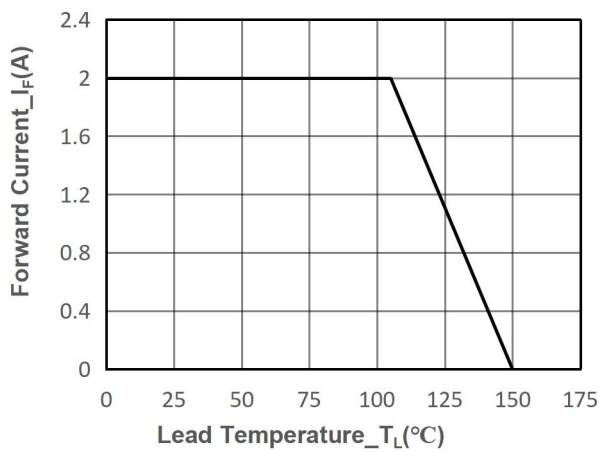
● **Typical Performance Characteristics**



Surge Forward Current Capability



Reverse Voltage vs. Reverse Current



Power Derating vs. Lead Temperature



- **Package Information**

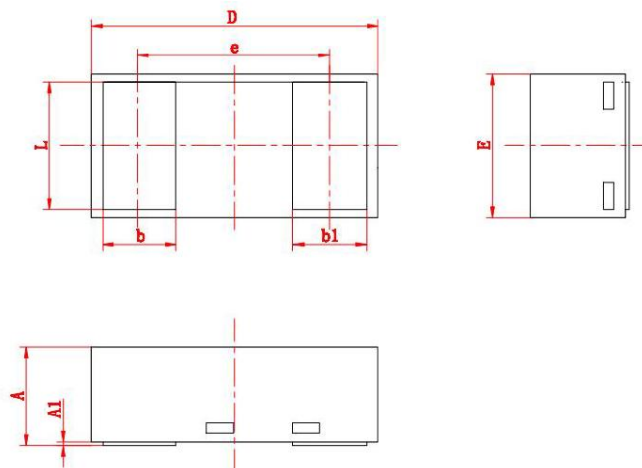
- ◇ **Ordering Information**

Device	Package	Marking	Qty per Reel	Reel Size
SSCS40201L6	DFN1608-2L	S24	3000	7 Inch

- ◇ **Mechanical Data**

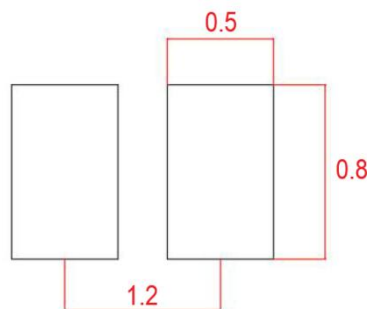
Case: DFN1608-2L

Case Material: Molded Plastic. UL Flammability



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

- ◇ **Recommended Pad outline (Unit: mm)**





DISCLAIMER

SSCSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. SSCSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICIENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G., OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.

OUR PRODUCT SPECIFICATIONS ARE ONLY VALID IF OBTAINED THROUGH THE COMPANY'S OFFICIAL WEBSITE, CRM SYSTEM, OR OUR SALES PERSONNEL CHANNELS. IF CHANGES OR SPECIAL VERSIONS ARE INVOLVED, THEY MUST BE STAMPED WITH A QUALITY SEAL AND MARKED WITH A SPECIAL VERSION NUMBER TO BE VALID.