



## SSCSMBR140D2

### Schottky Barrier Diode

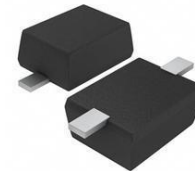
#### ● Features

- ✧ Low reverse current and low forward voltage
- ✧ High reliability
- ✧ Small surface mounting type
- ✧ High temperature soldering guaranteed:  
260° C/10 seconds at terminals
- ✧ Plastic package has Underwriters Laboratory  
Flammability Classification 94V-0

#### ● Applications

- ✧ Low Voltage Rectification
- ✧ High-Efficiency DC-DC Conversion
- ✧ Switch Mode Power Supply
- ✧ Inverse Polarity Protection

#### ● PIN configuration



**SOD-323F**



**Circuit Diagram**



**Marking (Top View)**

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

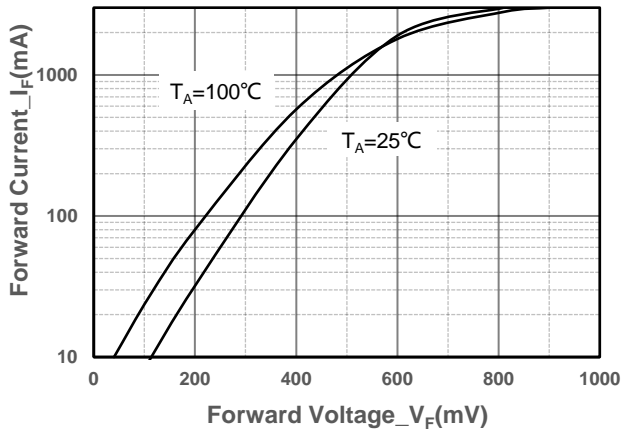
Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Rectified Current @T <sub>C</sub> = 75°C	I <sub>F(AV)</sub>	2	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	15	A
Typical Thermal Resistance	R <sub>θJA</sub>	400	°C/W
Operating Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C

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

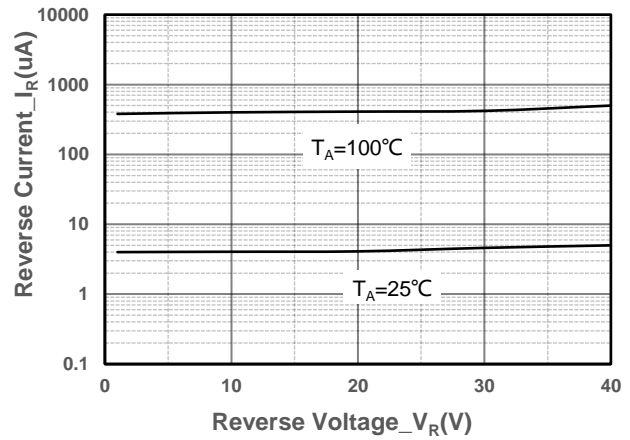
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V <sub>BR</sub>	I <sub>R</sub> = 250μA	40	50		V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 0.5A		0.42	0.50	V
		I <sub>F</sub> = 1.0A		0.48	0.55	
		I <sub>F</sub> = 3.0A		0.80	0.90	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 40V		5	50	μA
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> = 4V, f = 1MHz		50		pF



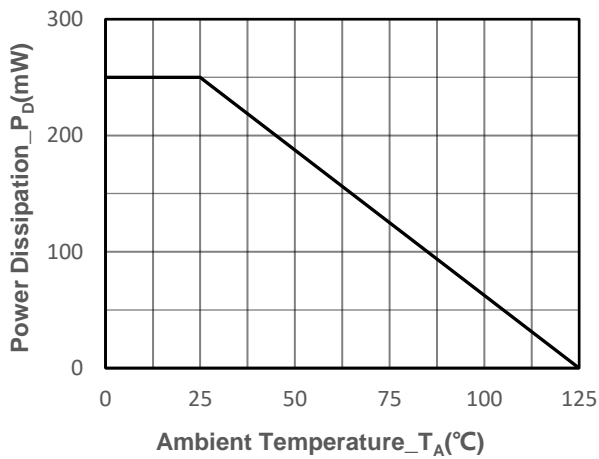
- Typical Performance Characteristics



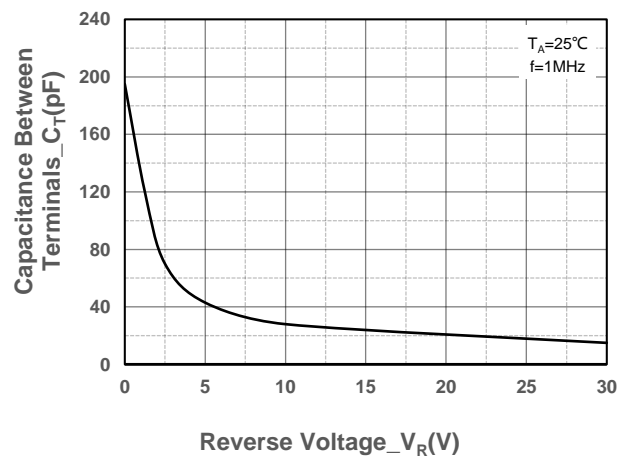
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Capacitance vs. Reverse Voltage



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## ● Package Information

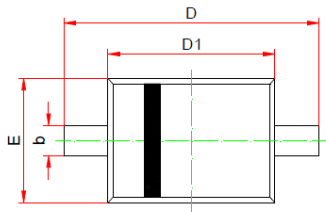
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSMBR140D2	SOD-323F	SL	3000	7 Inch

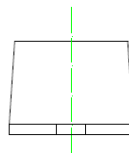
### Mechanical Data

Case: SOD-323F

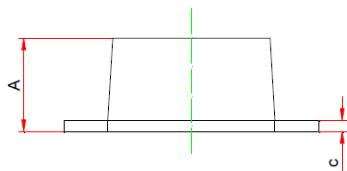
Case Material: Molded Plastic. UL Flammability



TOP VIEW



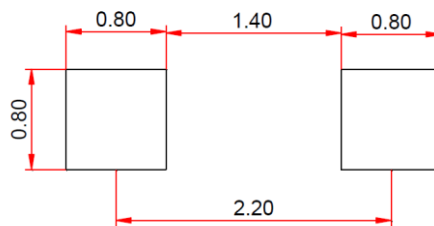
SIDE VIEW



SIDE VIEW

Dim	Millimeters	
	Min	Max
A	0.80	1.10
b	0.25	0.40
c	0.10	0.15
D	2.30	2.80
D1	1.60	1.80
E	1.15	1.35

### Recommended Pad outline (Unit: mm)





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