



## SSCSSS12D1 THRU SSCSSS120D1

### Schottky Barrier Diode

#### ● Features

- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Ultrafast reverse recovery time
- ✧ Low power losses, high efficiency
- ✧ Low forward voltage drop
- ✧ High surge capability
- ✧ UL Flammability Classification Rating 94V-0
- ✧ High temperature soldering: 260°C/10 seconds at terminals

#### ● PIN configuration



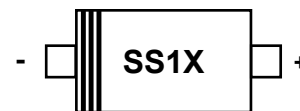
**SOD-123FL**



**Circuit Diagram**

#### ● Applications

- ✧ Low Voltage
- ✧ High-Frequency Inverters
- ✧ Free Wheeling
- ✧ Polarity Protection



**Marking**

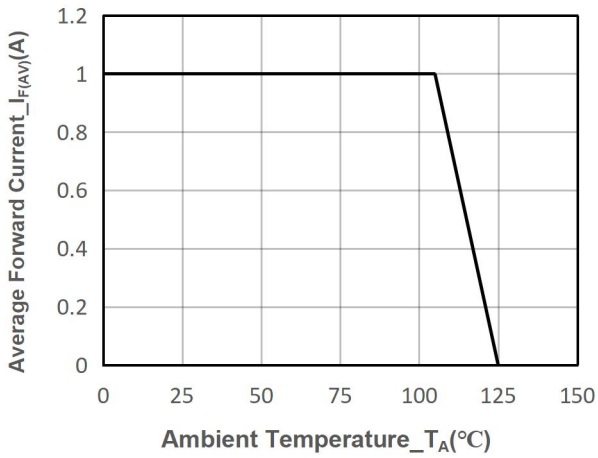
(SS14:SSCSSS14D1 Marking Code)

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

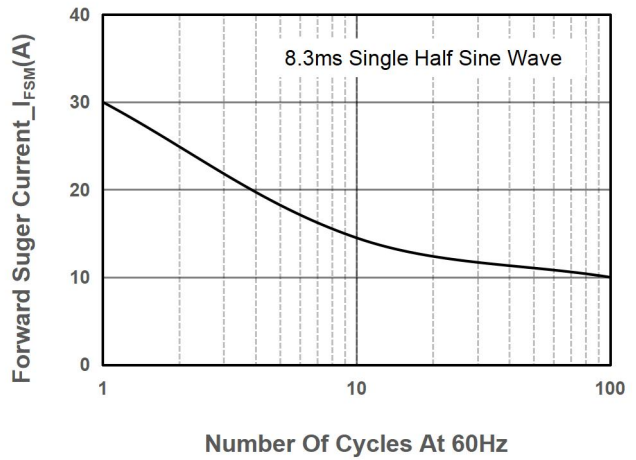
Parameter	Symbol	SS12D1	SS14D1	SS16D1	SS110D1	SS115D1	SS120D1	Unit
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	42	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1.0						A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	30						A
Max Instantaneous Forward Voltage at 2 A	V <sub>F</sub>	0.6	0.6	0.75	0.85	0.95	0.95	V
Maximum DC Reverse Current T <sub>a</sub> = 25 °C	I <sub>R</sub>	500						μA
at Rated DC Blocking Voltage T <sub>a</sub> = 125 °C		20						mA
Operating Temperature	T <sub>J</sub>	-55 ~ +125						°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150						°C



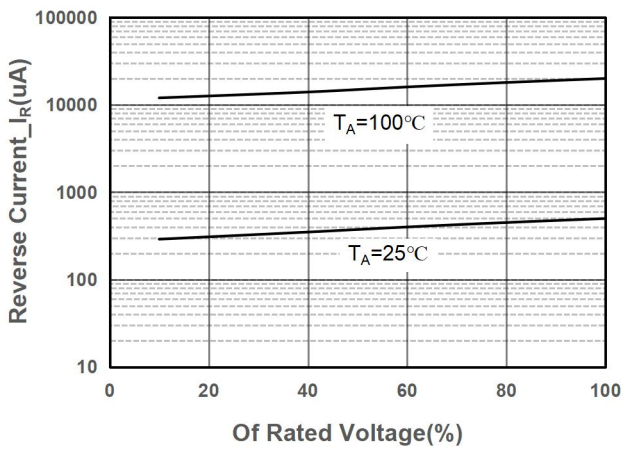
## ● Typical Performance Characteristics



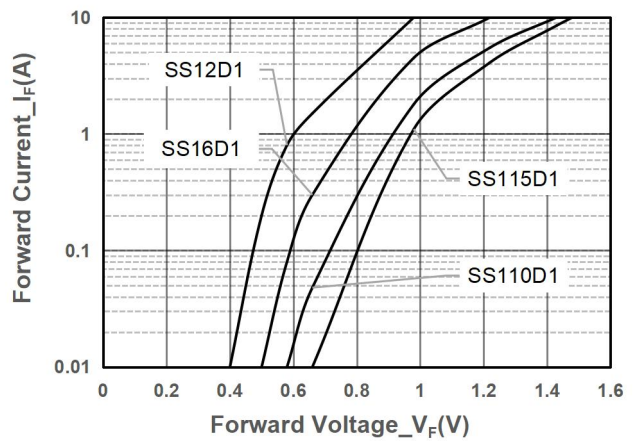
$I_o$  -TL Curve



Surge Forward Current Capability Voltage



Typical Reverse Characteristics



Forward Voltage vs. Forward Current



## ● Package Information

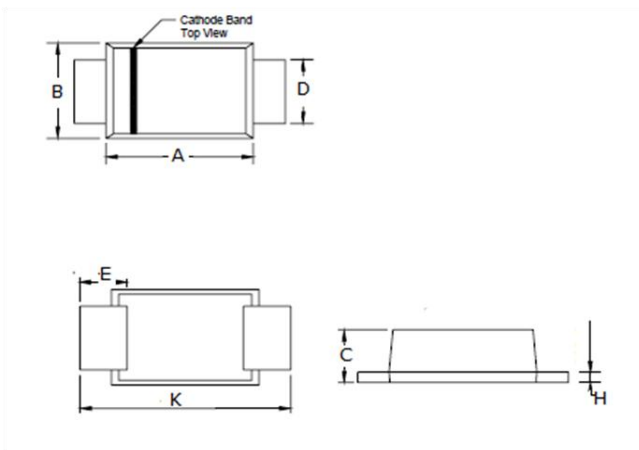
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSSS12D1	SOD-123FL	SS12	3000	7 Inch
SSCSSS14D1	SOD-123FL	SS14	3000	7 Inch
SSCSSS16D1	SOD-123FL	SS16	3000	7 Inch
SSCSSS110D1	SOD-123FL	SS110	3000	7 Inch
SSCSSS115D1	SOD-123FL	SS115	3000	7 Inch
SSCSSS120D1	SOD-123FL	SS120	3000	7 Inch

### Mechanical Data

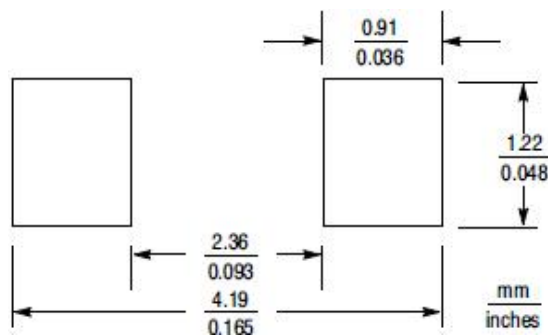
Case: SOD-123FL

Case Material: Molded Plastic. UL Flammability



Dim	Millimeters	
	Min	Max
<b>A</b>	2.50	2.90
<b>B</b>	1.50	1.90
<b>C</b>	0.095	1.20
<b>D</b>	0.70	1.20
<b>E</b>	0.35	0.85
<b>H</b>	0	0.1
<b>K</b>	3.40	3.90

### Recommended Pad outline





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