



## SSCSSS52DC THRU SSCSSS520DC

### Schottky Barrier Diode

#### ● Features

- ✧ Reverse Voltage - 20 to 200 V
- ✧ Forward Current - 5.0A
- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Ultrafast reverse recovery time
- ✧ Low power losses, high efficiency
- ✧ Low forward voltage
- ✧ High surge capability
- ✧ UL Flammability Classification Rating 94V-0
- ✧ High temperature soldering: 260°C/10 seconds at terminals

#### ● PIN configuration



**SMC/DO-214AB**



**Circuit Diagram**



**Marking**

(SS54:SSCSSS54DC Marking Code)

#### ● Applications

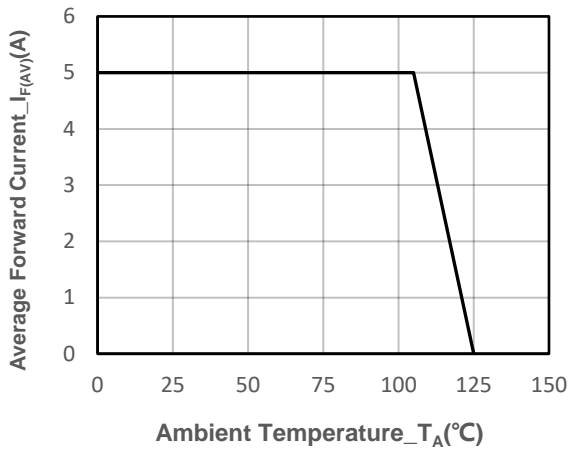
- ✧ Low Voltage
- ✧ High-Frequency Inverters
- ✧ Free Wheeling
- ✧ Polarity Protection

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

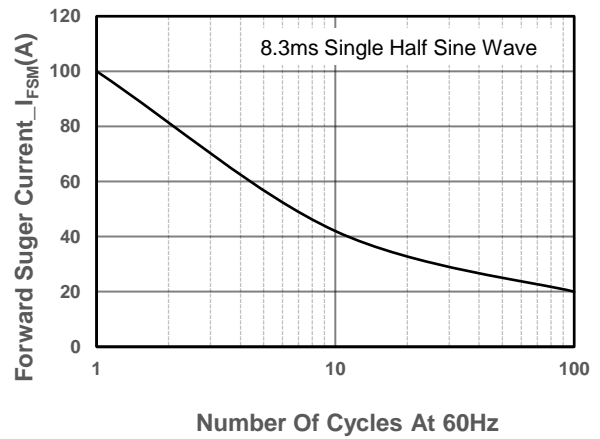
Parameter	Symbol	SS52DC	SS54DC	SS56DC	SS510DC	SS515DC	SS520DC	Unit
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	42	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	5.0						A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	100						A
Max Instantaneous Forward Voltage at 3 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 at Rated DC Blocking Voltage T <sub>a</sub> =125 °C	I <sub>R</sub>	500						μA
		20						mA
Operating Temperature	T <sub>J</sub>	-55 ~ +125						°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150						°C



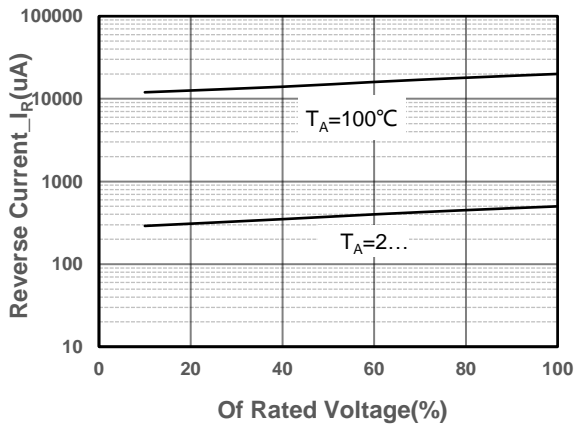
## ● Typical Performance Characteristics



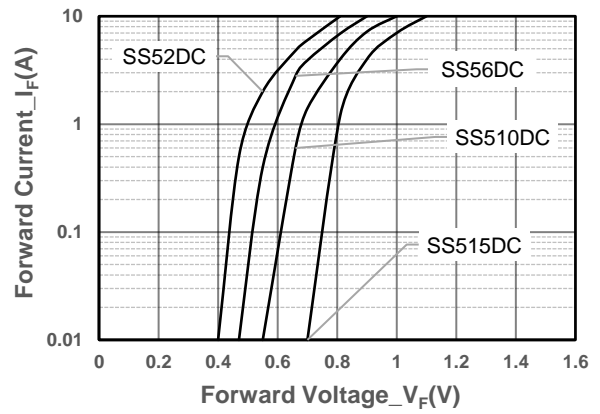
$I_o$  -TL Curve



Surge Forward Current Capability Voltage



Typical Reverse Characteristics



Forward Voltage vs. Forward Current



## ● Package Information

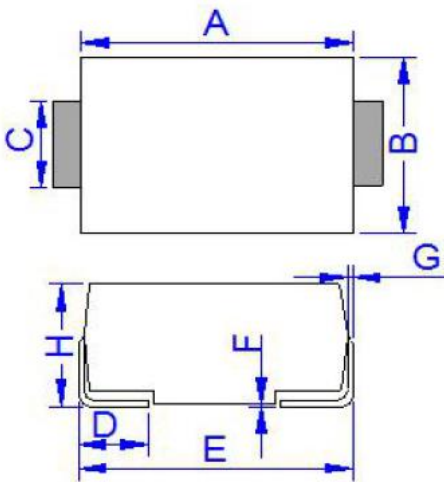
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel diameters
SSCSS52DC	SMC/DO-214AB	SS52	3000	13inch
SSCSS54DC	SMC/DO-214AB	SS54	3000	13inch
SSCSS56DC	SMC/DO-214AB	SS56	3000	13inch
SSCSS510DC	SMC/DO-214AB	SS510	3000	13inch
SSCSS515DC	SMC/DO-214AB	SS515	3000	13inch
SSCSS520DC	SMC/DO-214AB	SS520	3000	13inch

### Mechanical Data

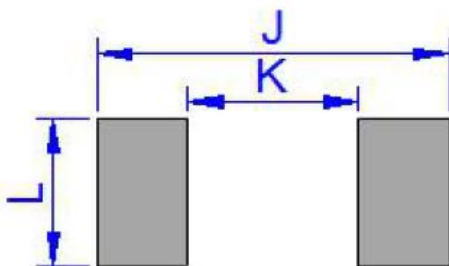
Case: SMC/DO-214AB

Case Material: Molded Plastic. UL Flammability



DMI	Millimeters	
	Min	Max
A	6.60	7.11
B	5.59	6.20
C	2.75	3.20
D	0.76	1.52
E	7.71	8.13
F	0.051	0.023
G	0.15	0.31
H	2.06	2.62

### Recommended Pad outline



DMI	Millimeters	
	Min	Max
J	8.12	
K		4.69
L	3.07	



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