



## SSCSSS52DAF THRU SSCSSS520DAF

### 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



**SMAF**



**Circuit Diagram**



**Marking**

(SS54:SSCSSS54DAF Marking Code)

#### ● Applications

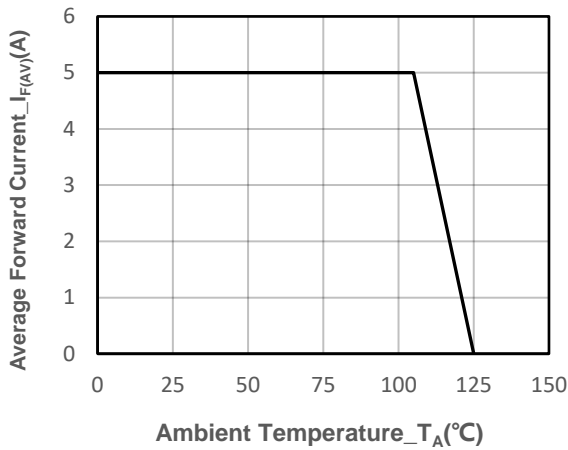
- ✧ Low Voltage
- ✧ High-Frequency Inverters
- ✧ Free Wheeling
- ✧ Polarity Protection

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

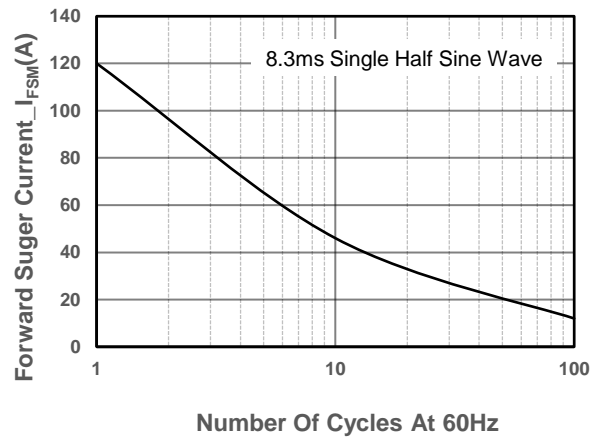
Parameter	Symbol	SSCSSS						Unit
		52DAF	54DAF	56DAF	510DAF	515DAF	520DAF	
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	42	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	5.0						A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	120.0						A
Max Instantaneous Forward Voltage at 3 A	V <sub>F</sub>	0.55	0.55	0.70	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> = 100 °C	I <sub>R</sub>	0.2			0.05			mA
		20			5			
Operating Temperature	T <sub>J</sub>	-55 ~ +150						°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150						°C



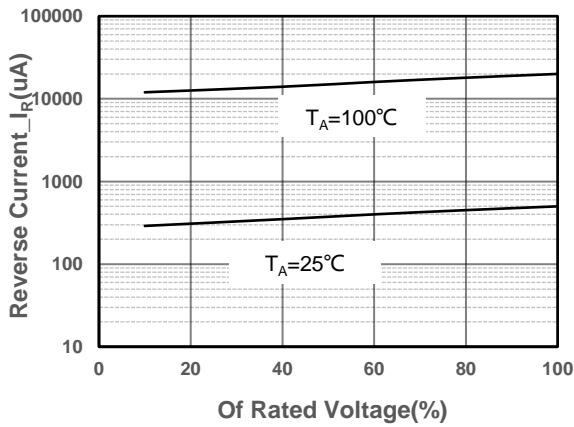
## ● Typical Performance Characteristics



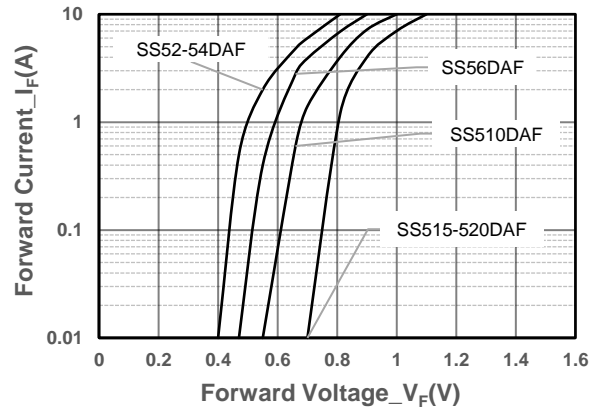
$I_o$  -TL Curve



Surge Forward Current Capability Voltage



Typical Reverse Characteristics



Forward Voltage vs. Forward Current



## ● Package Information

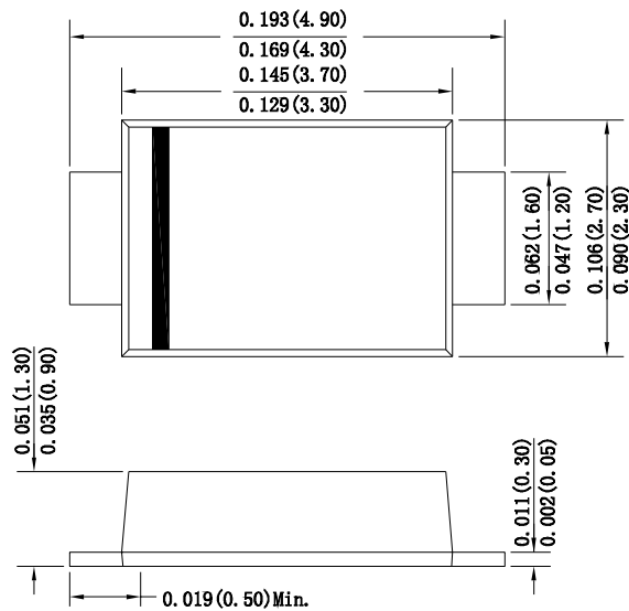
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel diameters
SSCSS52DAF	SMAF	SS52	3000	7inch
SSCSS54DAF	SMAF	SS54	3000	7inch
SSCSS56DAF	SMAF	SS56	3000	7inch
SSCSS510DAF	SMAF	SS510	3000	7inch
SSCSS515DAF	SMAF	SS515	3000	7inch
SSCSS520DAF	SMAF	SS520	3000	7inch

### Mechanical Data

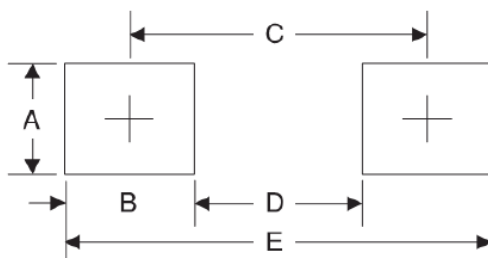
Case: SMAF

Case Material: Molded Plastic. UL Flammability



**Dimensions in inches and (millimeters)**

### Recommended Pad outline



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.00	0.078
E	5.10	0.200



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