



## SSCSSS32DAF THRU SSCSSS320DAF

### Schottky Barrier Diode

#### ● Features

- ✧ Reverse Voltage - 20 to 200 V
- ✧ Forward Current - 3.0A
- ✧ 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**

#### ● Applications

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



**Marking**

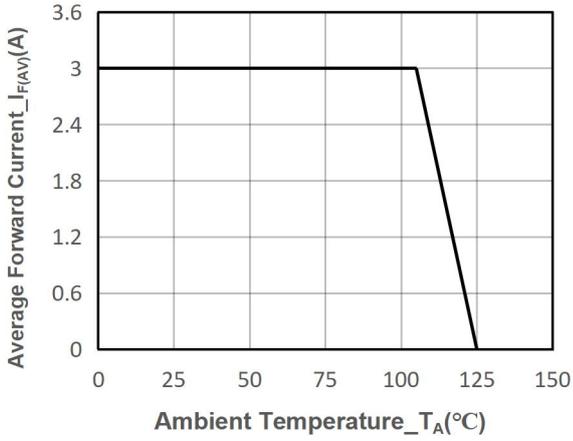
(SS34:SSCSSS34DAF Marking Code)

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

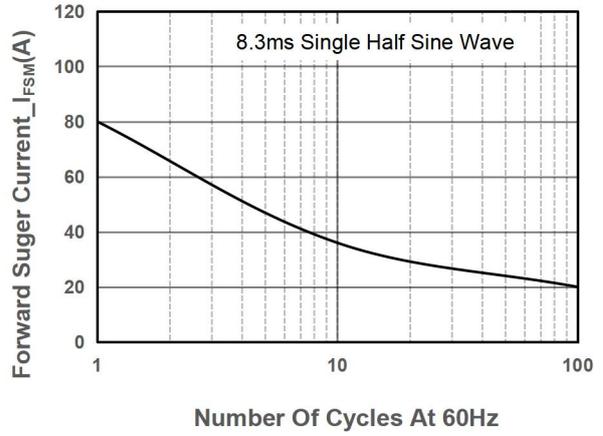
Parameter	Symbol	SSCSSS						Unit
		32DAF	34DAF	36DAF	310DAF	315DAF	320DAF	
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	42	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3.0						A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	80						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



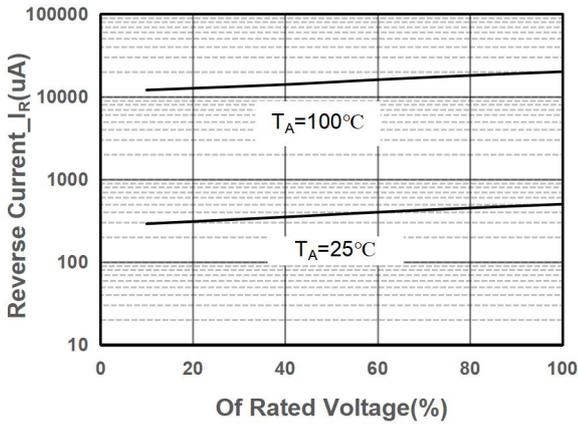
## ● Typical Performance Characteristics



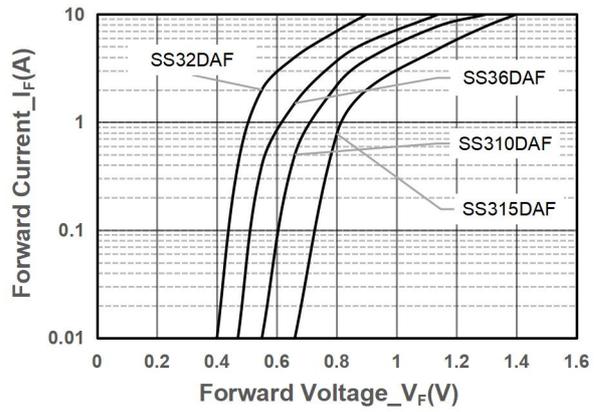
$I_o$  -TL Curve



Surge Forward Current Capability Voltage



Typical Reverse Characteristics



Forward Voltage vs. Forward Current



- **Package Information**

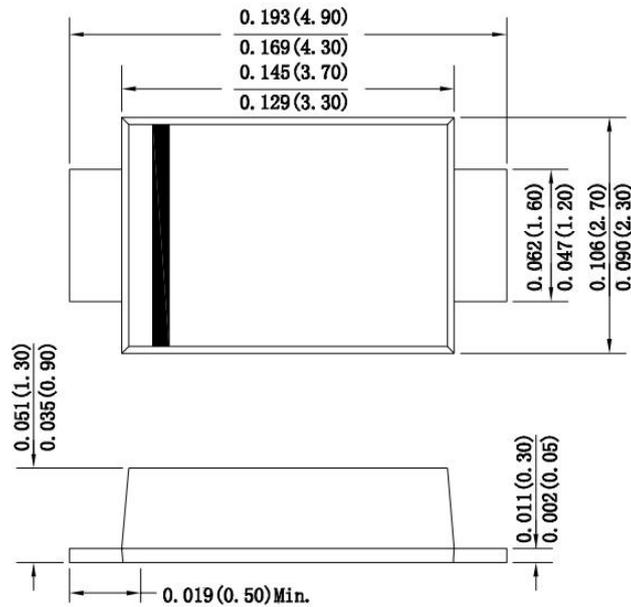
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSS32DAF	SMAF	SS32	3000	7 Inch
SSCSS34DAF	SMAF	SS34	3000	7 Inch
SSCSS36DAF	SMAF	SS36	3000	7 Inch
SSCSS310DAF	SMAF	SS310	3000	7 Inch
SSCSS315DAF	SMAF	SS315	3000	7 Inch
SSCSS320DAF	SMAF	SS320	3000	7 Inch

### Mechanical Data

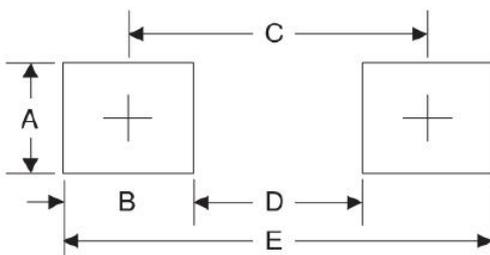
Case: SMAF

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



## 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.