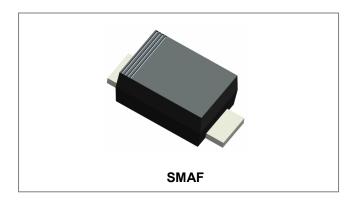


SS32AF THRU SS320AF

RoHS

## Technical Data Data Sheet N1949, Rev. A SS32AF THRU SS320AF SCHOTTKY RECTIFIER



## Features

- Schottky Barrier Rectifier
- Guard Ring Die Protection
- Low Forward Voltage
- Reverse Energy Tested
- High Current Capability
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- This is a Halogen Free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

## **Mechanical Data**

- Case: JEDEC SMAF molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.038 grams
- Mounting Position: Any

# Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	SS32 AF	SS33 AF	SS35 AF	SS36 AF	SS38 AF	SS310 AF	SS315 AF	SS320 AF	Units
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V <sub>RRM</sub> V <sub>DC</sub>	20	30	50	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	35	42	56	70	105	150	V
Maximum Average Forward Rectified Current at $T_L$ (see fig.1)	I <sub>F(AV)</sub>	3.0					Α			
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	70					A			
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> = 3.0A, T <sub>J</sub> = 25°C	VF	0.5	0.55 0.70		0.85		0.95	V		
Maximum DC Reverse Current @T」= 25°C		0.5 0.1						mA		
At Rated DC Blocking Voltage @T <sub>J</sub> = 100°C	IR		20	20		10		2	2.0	
Typical Junction Capacitance(Note 1)	CJ	500		300				pF		
Typical Thermal Resistance Junction to Ambient(Note 2)	R <sub>θJA</sub>	80					°C/W			
Operating Temperature Range	TJ	-55 to +125		-55 to +150				°C		
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C			

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

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## **Circuit Diagram**

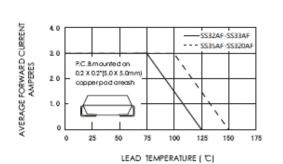




Technical Data Data Sheet N1949, Rev. A

## **Ratings and Characteristics Curves**

FIG.1-FORWARD CURRENT DERATING CURVE



#### FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

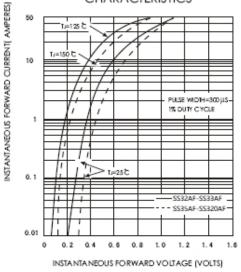


FIG.5-TYPICAL JUNCTION CAPACITANCE

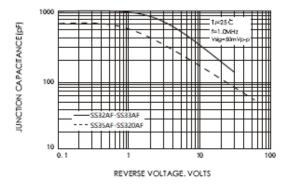
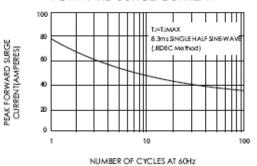
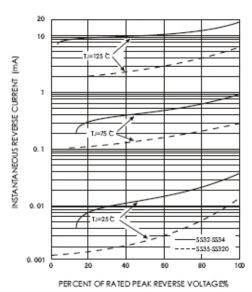


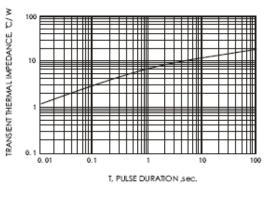
FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



## FIG.4-TYPICAL REVERSE CHARACTERISTICS



### FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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## SS32AF THRU SS320AF

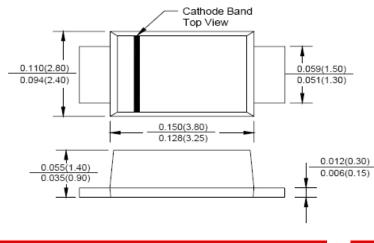
RoHS HF

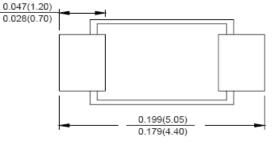
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## **Technical Data** Data Sheet N1949, Rev. A

# Mechanical Dimensions SMAF(Millimeters/Inches)



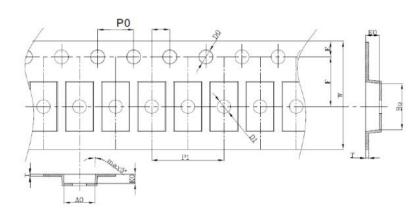


# **Ordering Information**

Device	Package	Shipping
SS32AF		
THRU	SMAF	3000pcs / reel
SS320AF		
SS32AFTR		
THRU	SMAF	3000pcs / reel
SS320AFTR		

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

# **Carrier Tape Specification SMAF**



SYMBOL	Millimeters				
STWBUL	Min.	Max.			
A0	2.83	3.03			
B0	2.23	5.43			
K0	1.23	1.43			
P0	3.90	4.10			
P1	3.90	4.10			
P2	1.90	2.10			
Т	0.17	0.23			
E	1.63	1.83			
F	5.45	5.65			
D0	1.50	1.60			
D1	1.45	1.55			
W	11.70	12.30			

#### Where XXXXX is YYWWL YYWWL date code marked on box.

SS32AF = Part Name = Year YY ww = Week = Lot Number 1



SS32AF







#### HF RoHS



#### Technical Data Data Sheet N1949, Rev. A

SS32AF THRU SS320AF

RoHS

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