



SS32F THRU SS320F



SCHOTTKY RECTIFIERS

VOLTAGE

20~200 Volts

CURRENT

3.0 Amperes

SMAF

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

- **Case:** Molded plastic, SMAF
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

TYPICAL APPLICATIONS

- For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

Marking



Remark:

- (1).NH=niuhang trademark;
- (2).xxxxx:
The first five xxxxx:Periodic code, According to actual changes;
- (3).SS3XXF=Mode;
- (4).White edge=Polarity mark.

Maximum Ratings and Electrical Characteristics(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	SS 32F	SS 33F	SS 34F	SS 36F	SS 38F	SS 310F	SS 315F	SS 320F	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	60	80	100	150	200	V
Maximum average forward rectified current(see fig.1)	$I_{F(AV)}$	3								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	80								A
Maximum instantaneous forward voltage at 3.0 A (Note 1)	V_F	0.55		0.70	0.85		0.95		V	
Maximum instantaneous reversecurrent at rated DC blockingvoltage (Note 2)	I_{RRM}	0.2			0.05		0.02		mA	
		50								
Typical junction capacitance (Note 3)		500			400				pF	
Operating junction and Storage temperature range	T_J	-65 to +125				-65 to +150				°C
Storage temperature range	T_{STG}	-65 to +150								

Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	SS32F THRU SS320F	Unit
Typical thermal resistance (Note 4)	$R_{\theta JA}$	78	°C/W
	$R_{\theta JL}$	18	

- Note: 1.Pulse test: 300 μs pulse width, 1% duty cycle
 2.Pulse test: pulse width≤40ms
 3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 4.Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas.

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RATING AND CHARACTERISTIC CURVES

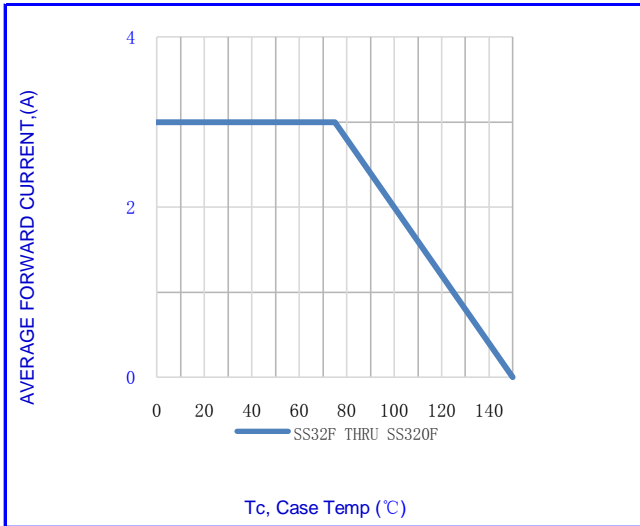


Fig. 1- FORWARD CURRENT DERATING CURVE

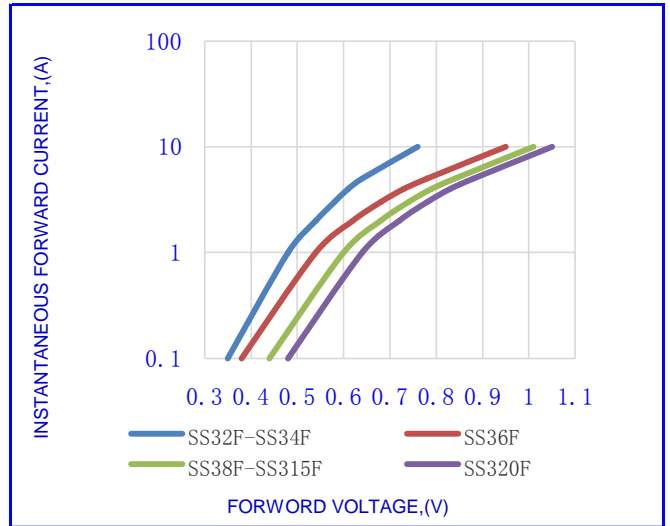


Fig. 2- TYPICAL INSTANTANEOUS FORWARD

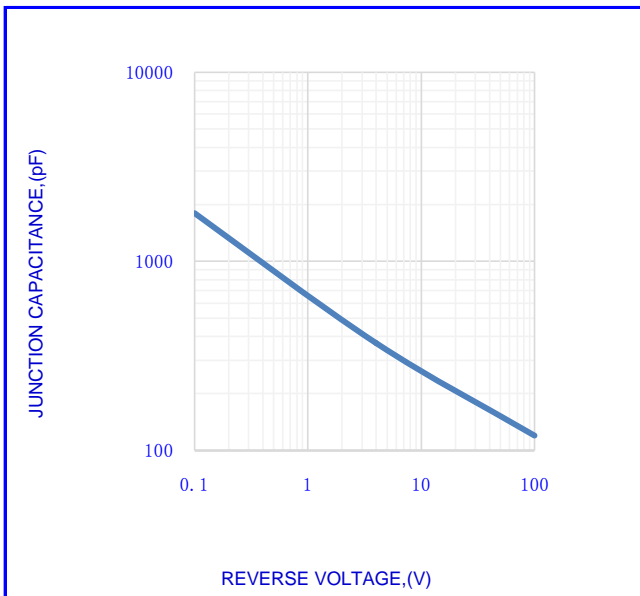


Fig. 3- TYPICAL JUNCTION CAPACITANCE

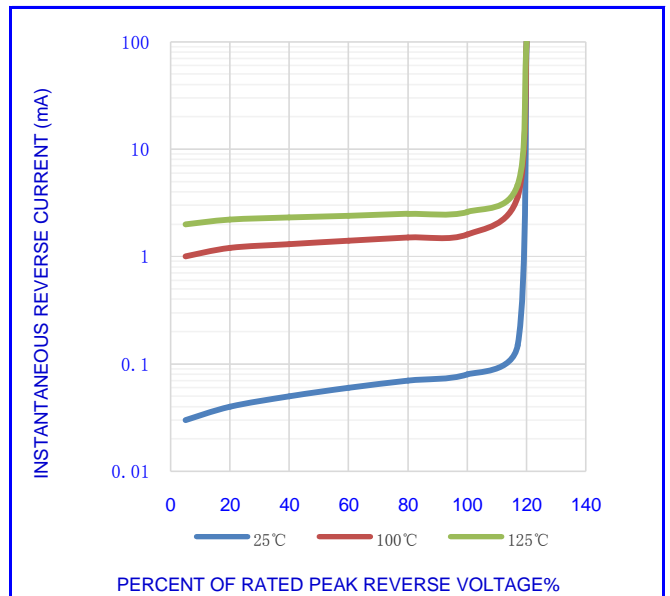


Fig. 4- TYPICAL REVERSE CHARACTERISTICS

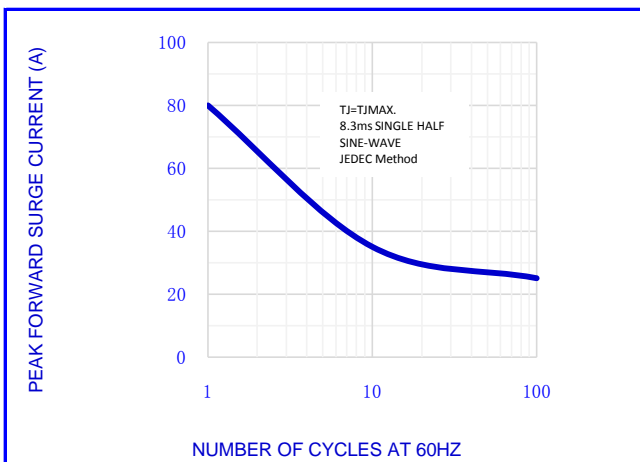
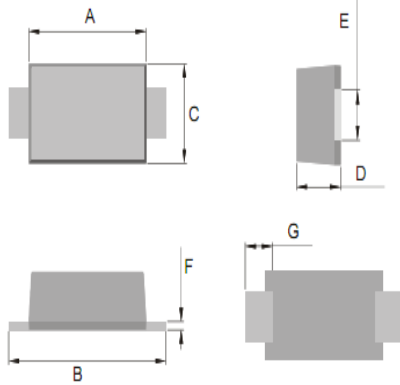


Fig. 5- MAX. NON-REPETITIVE SURGE CURRENT

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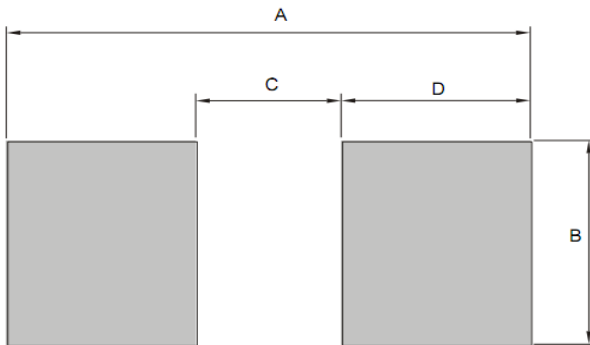
OUTLINE DRAWINGS



OUTLINE DIMENSIONS						
DIM	MILLIMETERS			INCHES		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	3.800	-	4.200	0.150	-	0.165
B	4.950	-	5.330	0.195	-	0.210
C	2.300	-	2.700	0.090	-	0.106
D	0.950	-	1.050	0.037	-	0.041
E	1.300	-	1.600	0.512	-	0.063
F	0.120	-	0.170	0.004	-	0.007
G	0.500	-	1.200	0.197	-	0.417

SMAF

MOUNTING PAD LAYOUT



OUTLINE DIMENSIONS						
DIM	MILLIMETERS			INCHES		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	-	5.800	-	-	0.228	-
B	-	2.060	-	-	0.081	-
C	-	1.660	-	-	0.065	-
D	-	2.070	-	-	0.082	-

38F

Packing Information

Package	Pack	Reel Size (mm)	Quantity (pcs/reel)	Carton Size LxWxH(mm)	Quantity (reel/carton)
SMAF	T/R	Φ330	5000	400*310*310	10