SS52F THRU SS520F

SCHOTTKY RECTIFIERS

VOLTAGE	20~200 Volts	CURRENT	5.0 Ampers	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℃/10 seconds at terminals

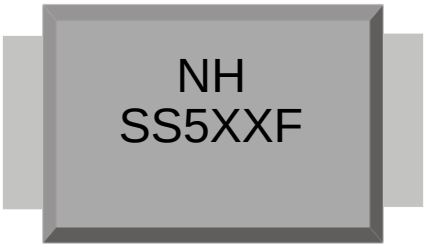
MECHANICAL DATA

- **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



Maximum Ratings and Electrical Characteristcs (Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	SS 52F	SS 53F	SS 54F	SS 56F	SS 58F	SS 510F	SS 515F	SS 520F	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.2)	$IF_{(AV)}$	5								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	100								A
Maximum instantaneous forward voltage at 5.0 A (Note 1)	V_F	0.55			0.70	0.85		0.95		V
Maximum instantaneous reversecurrent at rated DC blockingvoltage (Note 2) T_A=25℃ / T_A=100℃	I_{RRM}	0.5 / 50								mA
Typical junction capacitance (Note 3)		500			400					pF
Operating junction and Storage temperature range	T_J	-65 to +125				-65 to +150				℃
Storage temperature range	T_{STG}	-65 to +150								℃

Thermal Characteristcs (Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	SS52F THRU SS520F	Unit
Typical thermal resistance (Note 4)	$R_{\theta JA}$	60	℃/W

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.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

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Pb-Free RoHS COMPLIANT

RATINGANDCHARACTERISTICCURVES

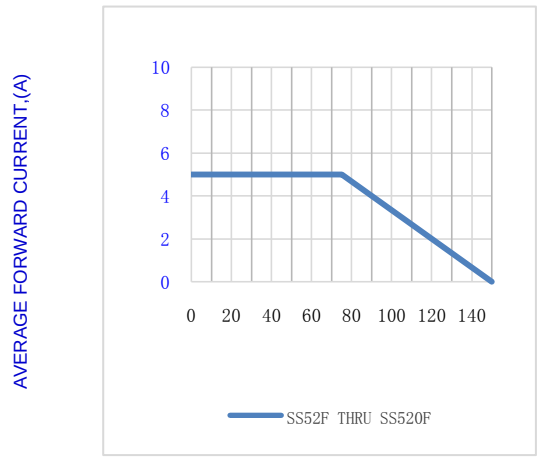


Fig.1-FORWARD CURRENT DERATING CURVE

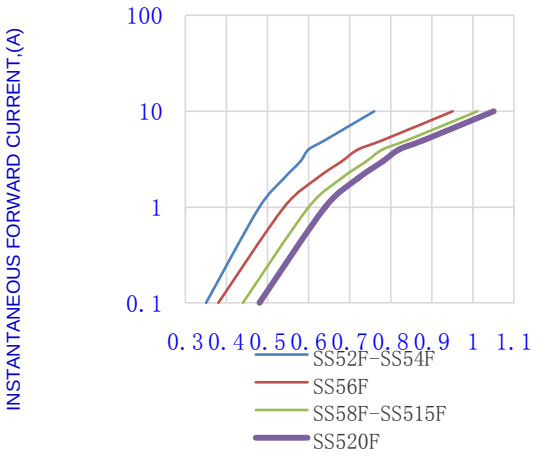


Fig.2- TYPICAL INSTANTANEOUS FORWARD

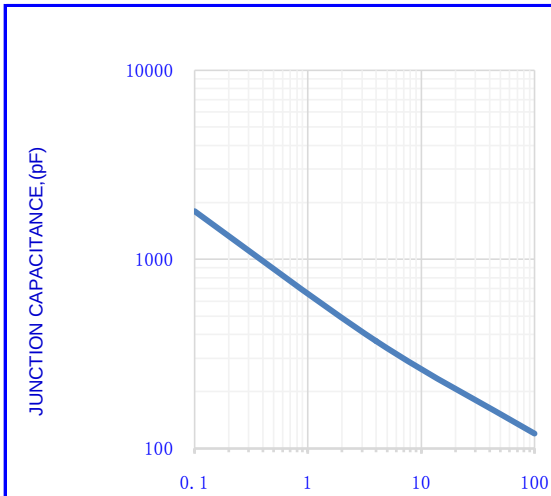


Fig.3- TYPICAL JUNCTION CAPACITANCE

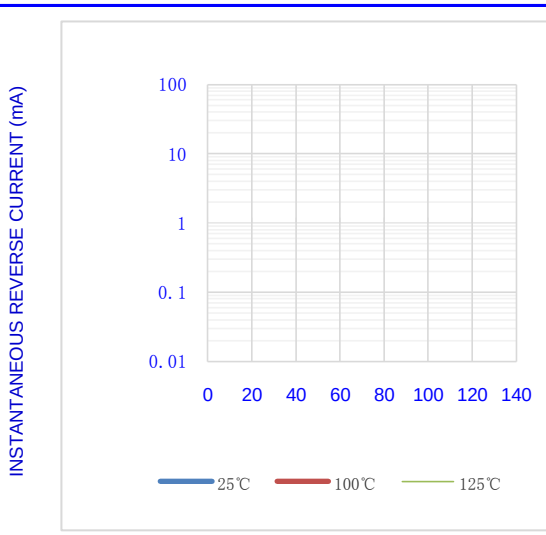


Fig.4- TYPICAL REVERSE CHARACTERISTICS

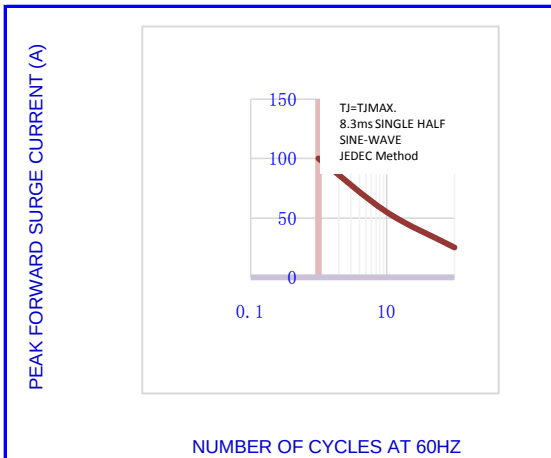


Fig.5-MAX. NON-REPETITIVE SURGE CURRENT

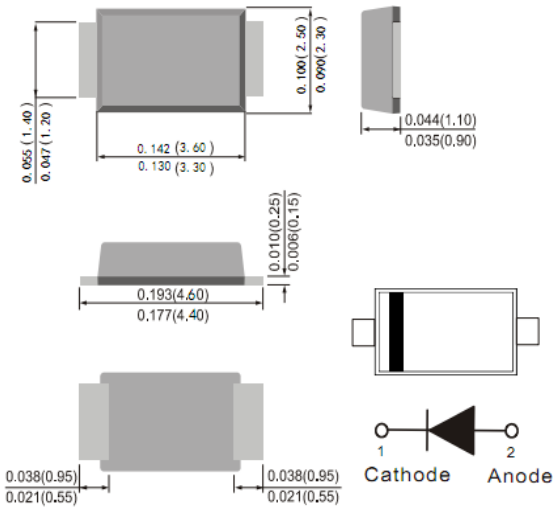
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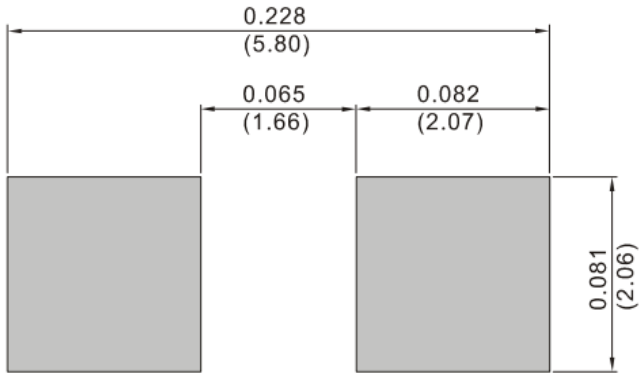
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OUTLINE DRAWINGS

SMA PACKAGE OUTLINE



Plastic surface mounted package



PCB Design(Recommended land dimensions for SMAF diode. Electrode patterns for PCBs)

Packing Information

Product code	Pack	Reel Size (mm)	Quantity(pcs/reel)	Quantity(reel/box)	Carton Size L×W×H (mm)	Quantity(box/carton)
SMAF	T/R	330	5000	2	364×364×360	8

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