

Features

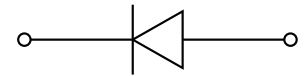
- Low reverse leakage
- Ideal for automated placement
- Guardring for overvoltage protection
- High forward surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

SMAF



Applications

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



Mechanical Data

- Case: SMAF
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

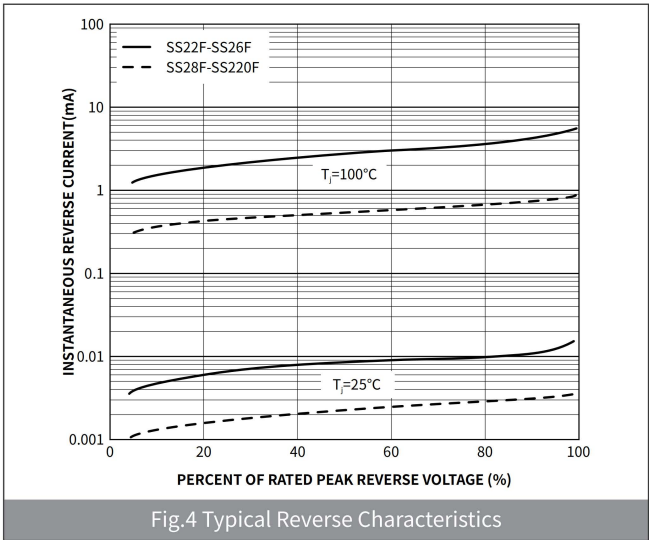
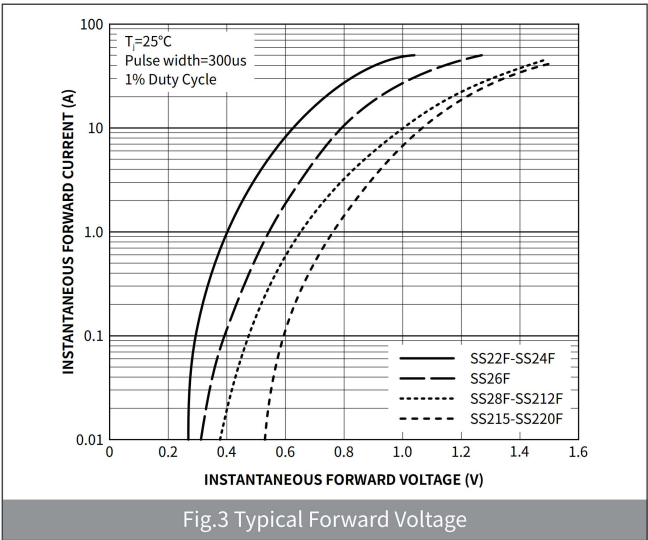
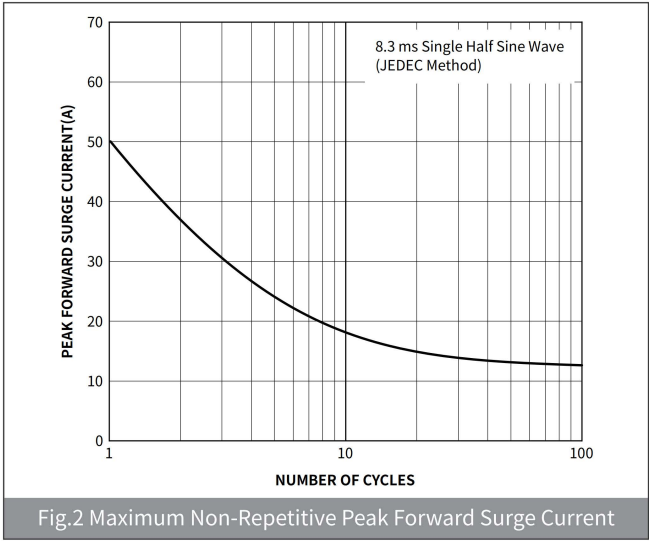
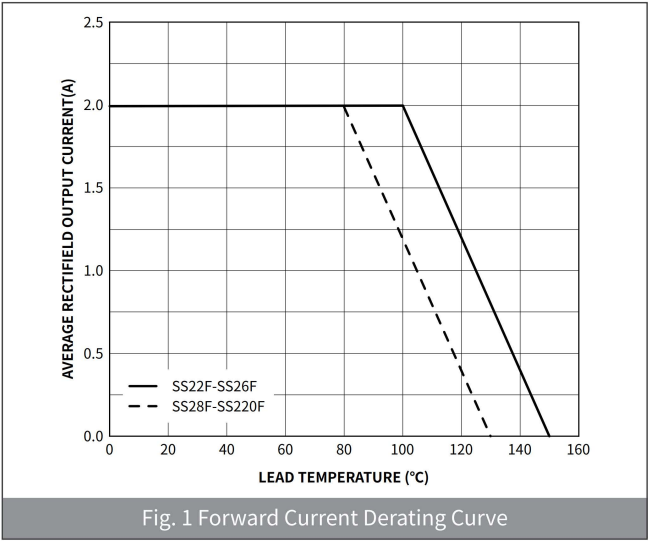
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F
Device marking code			SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	20	40	60	80	100	120	150	200
Maximum RMS Voltage	V _{RMS}	V	14	28	42	56	70	84	105	140
Maximum DC blocking Voltage	V _{DC}	V	20	40	60	80	100	120	150	200
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load, TL (Fig.1)	I _{F(AV)}	A	2.0							
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I _{FSM}	A	50							
Storage temperature	T _{stg}	°C	-55 ~ +150							
Junction temperature	T _j	°C	-55 ~ +125							
Typical Thermal Resistance	R _{θJ-A}	°C / W	70							
	R _{θJ-L}	°C / W	17							

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	TEST CONDITIONS		SYMBOL	UNIT	SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F
Maximum instantaneous forward voltage	I _F =2.0A		V _F	V	0.55		0.70	0.85			0.95	
Maximum DC reverse current at rated DC blocking voltage	V _{RM} =V _{DC}	Ta=25°C	I _R	mA	0.2			0.05				
		Ta=100°C			20			5.0				
Typic junction capacitance	4.0V DC, 1MHz		C _J	pF	160		80					

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMAF	R1	0.034	3000	12000	120000	7"
SMAF	R2	0.034	7500	15000	120000	11"
SMAF	R3	0.034	7500	/	120000	13"

Package Outline Dimensions (SMAF)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.30	1.60	0.051	0.063
B	3.30	3.70	0.129	0.145
C	2.40	2.70	0.094	0.105
D	4.40	4.90	0.172	0.191
E	0.90	1.20	0.035	0.047
F	0.80	1.20	0.031	0.047
G	0.12	0.20	0.005	0.008

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	1.80	-	0.070	-
J	1.60	-	0.063	-
K	-	2.2	-	0.086