

SMAF Plastic-Encapsulate Diodes

SS12F THRU SS120F Schottky Rectifier Diodes

Features

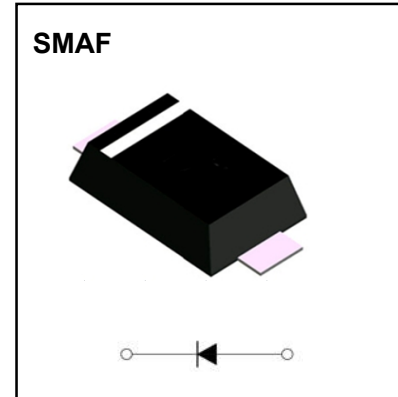
- $I_{F(AV)}$ 1A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SS1X
X : From 2 To 20



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS1								
				2F	3F	4F	5F	6F	8F	10F	15F	20F
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100	150	200
Maximum RMS Voltage	V _{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave, Resistance load, TL(Fig.1)	1.0								
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	30								
Junction Temperature	T _J	℃		-55~+125			-55~+150					
Storage Temperature	T _{STG}	℃		-55 ~ +150								

Electrical Characteristics ($T = 25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SS1							
					2F	3F	4F	5F	6F	8F	10F	15F
Peak Forward Voltage	V _F	V	I _F =1.0A		0.55		0.70		0.85		0.95	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.5				0.1			
	T _a =100℃			10		5.0						
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		88							
	R _{θJ-L}		Between junction and terminal		28							

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

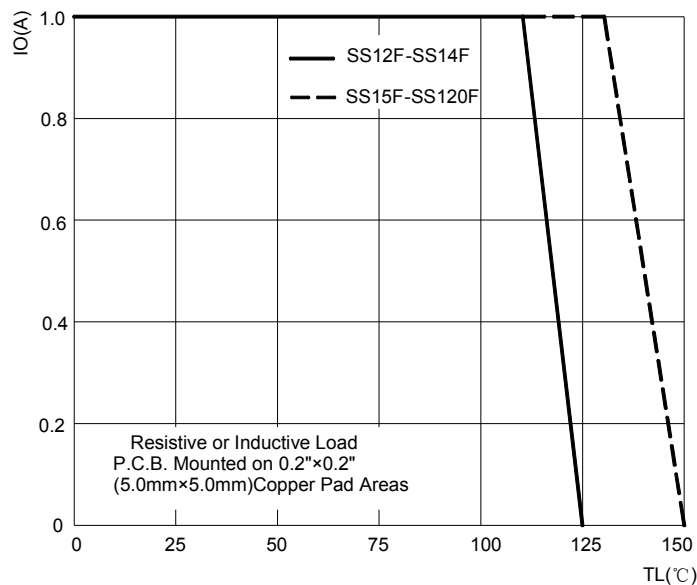


FIG2: Surge Forward Current Capability

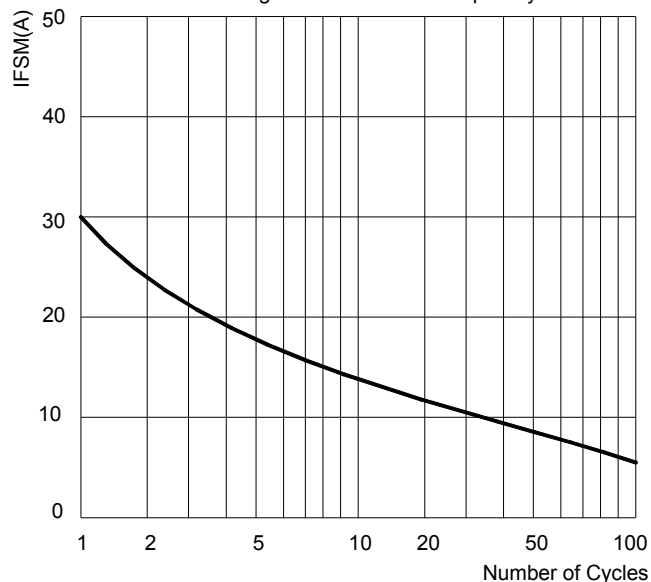


FIG.3: TYPICAL FORWARD CHARACTERISTICS

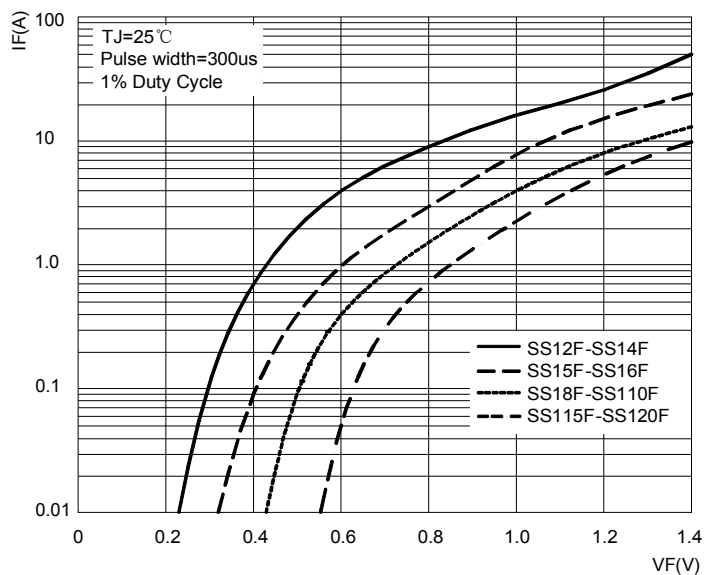
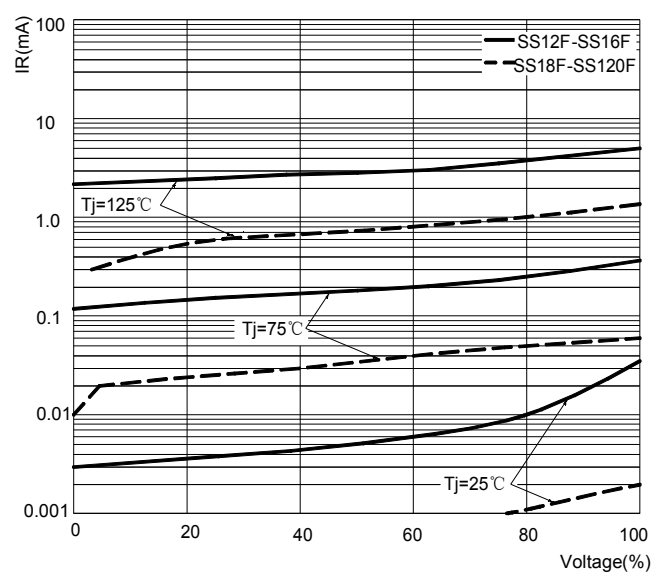
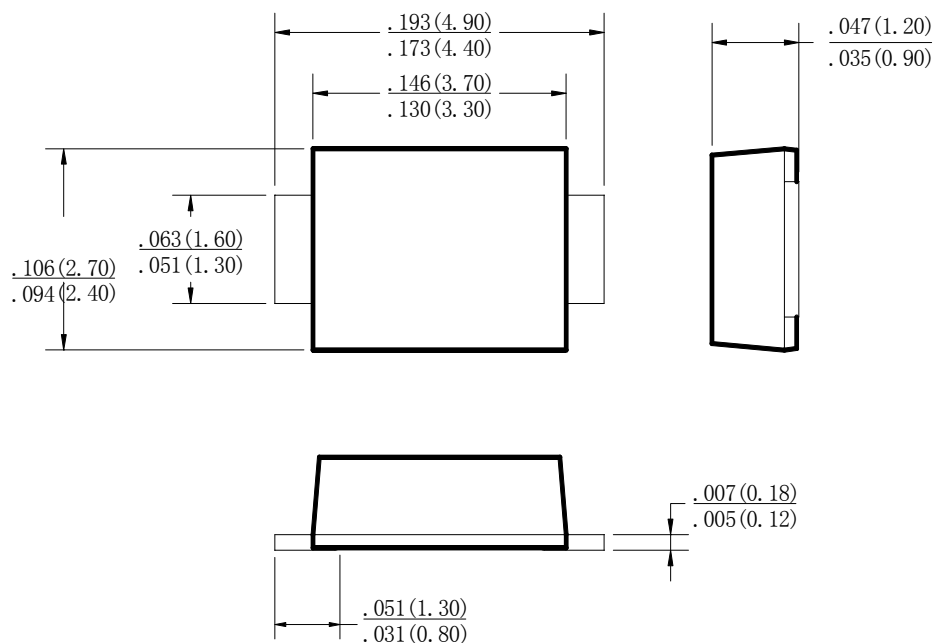


FIG.4: TYPICAL REVERSE CHARACTERISTICS

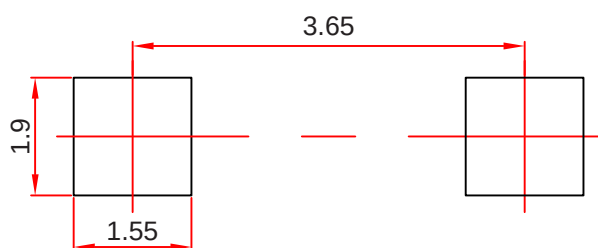


SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

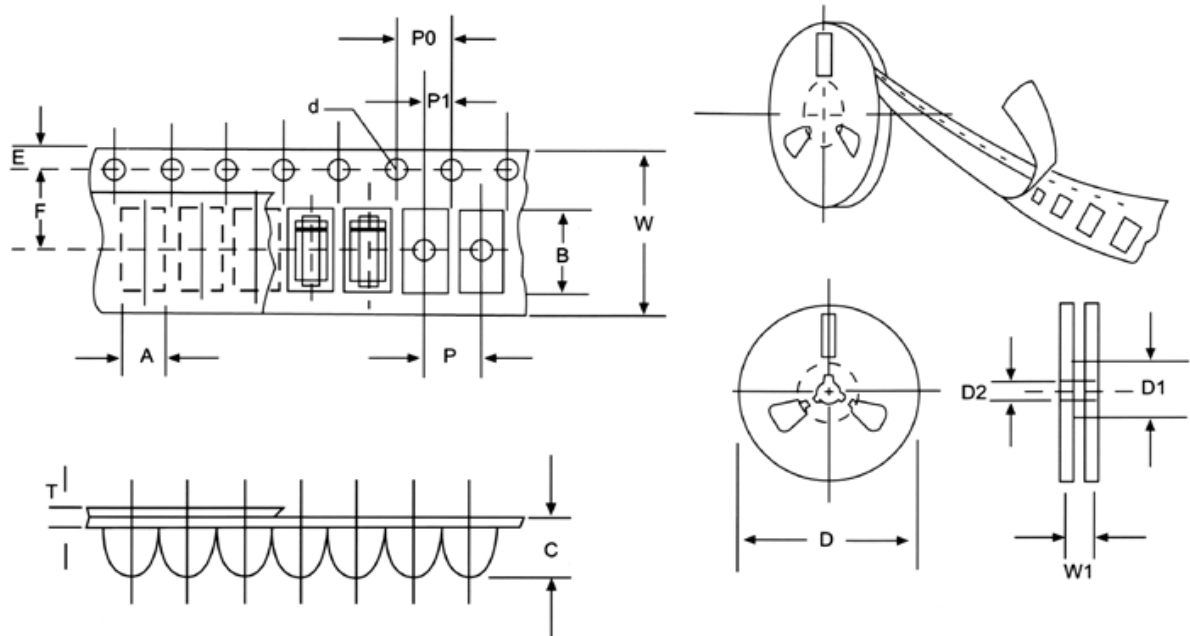


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMAF mm(inch)
Carrier width	A	2.83+0.1(0.112+0.004)
Carrier length	B	4.90+0.1(0.193+0.004)
Carrier depth	C	1.45+0.1(0.057+0.004)
Sprocket hole	d	1.55+0.05(0.061+0.002)
Reel outside diameter	D	178+2.0(7.0+0.079)
Reel inner diameter	D1	54±1.0(2.13±0.039)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Strocket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	5.5+0.05(0.217+0.002)
Punch hole pitch	P	4.0+0.1(0.157+0.004)
Sprocket hole pitch	P0	4.0+0.1(0.157+0.004)
Embossment center	P1	2.0+0.1(0.079+0.004)
Totall tape thickness	T	0.23-0.29(0.009-0.011)
Tape width	W	12.0+0.1(0.472+0.004)
Reel width	W1	16.8+2.0(0.661+0.079)

NOTE:Devices are packde in accordance with EIA standard RS-481-A and specification given above.