

SMAF Plastic-Encapsulate Diodes

Low VF Schottky Rectifier Diodes

Features

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

Applications

- Rectifier

Marking

- SS1XLF

X : From 2 To 20

SMAF



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KSS1								
				2LF	3LF	4LF	5LF	6LF	8LF	10LF	15LF	20LF
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)	5.0								
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	40								
Junction Temperature	T _J	℃		-55~+150								
Storage Temperature	T _{STG}	℃		-55 ~ +150								

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

Item	Symbol	Unit	Test Condition		KSS1							
					2LF	3LF	4LF	5LF	6LF	8LF	10LF	15LF
Peak Forward Voltage	V _F	V	I _F =5.0A		0.45		0.55		0.70		0.80	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.2							
	T _a =100℃			5.0								
Thermal Resistance(Typical)	R _{θJ-A}	℃/ W	Between junction and ambient		55							
	R _{θJ-L}		Between junction and terminal		17							

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

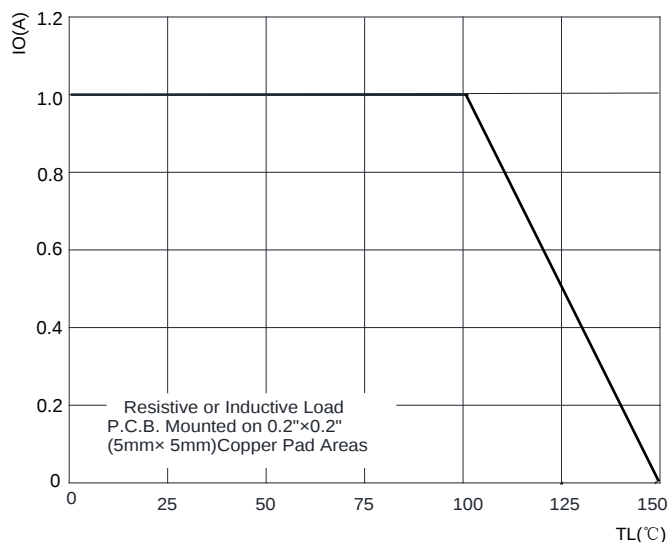


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

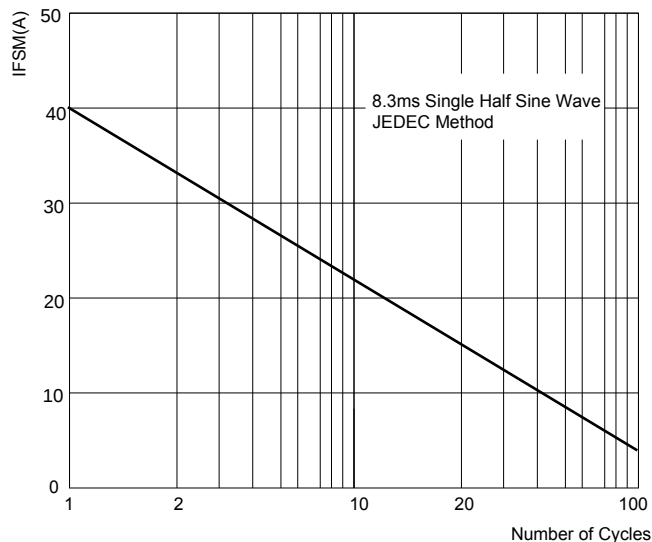


FIG.3: TYPICAL FORWARD CHARACTERISTICS

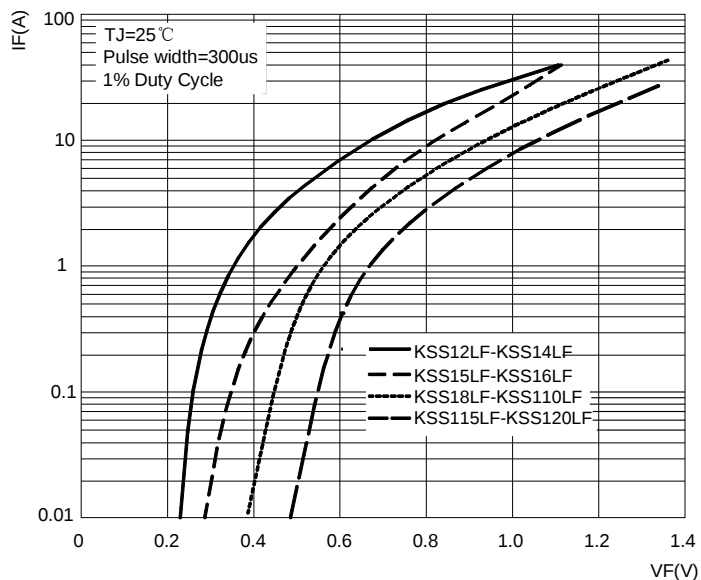
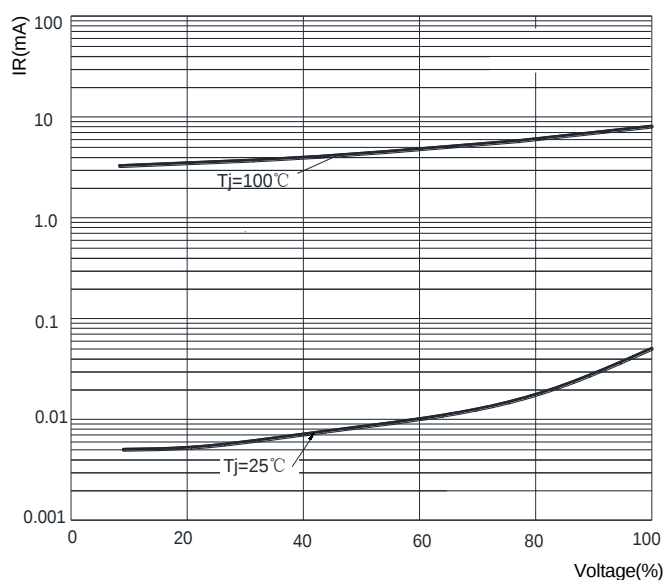
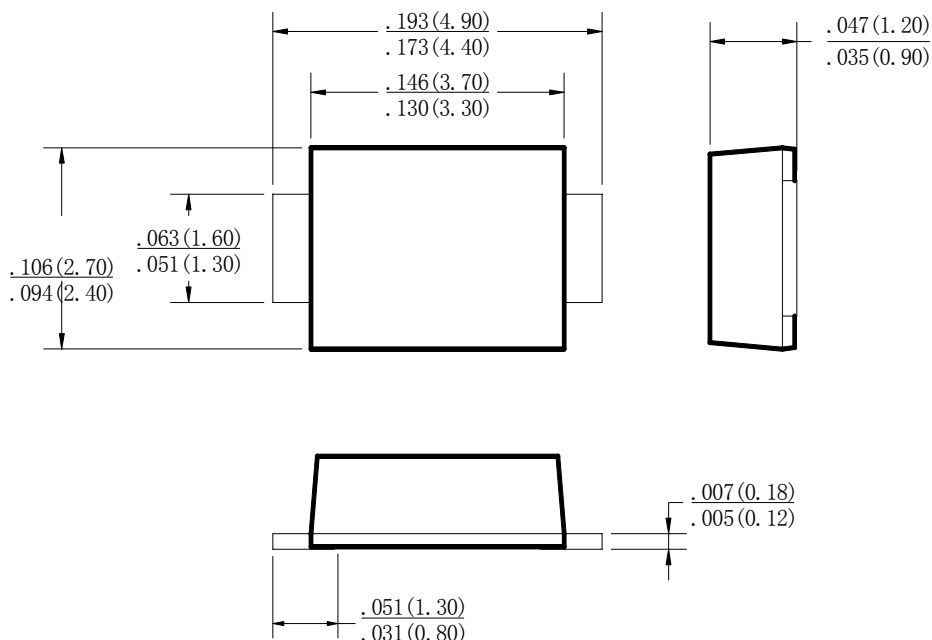


FIG.4: TYPICAL REVERSE CHARACTERISTICS

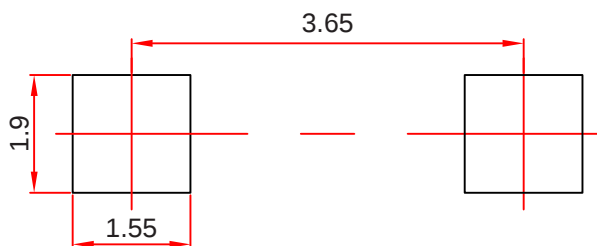


SMAF Package Outline Dimensions



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.

Reel Taping Specifications For Surface Mount Devices- SMAF

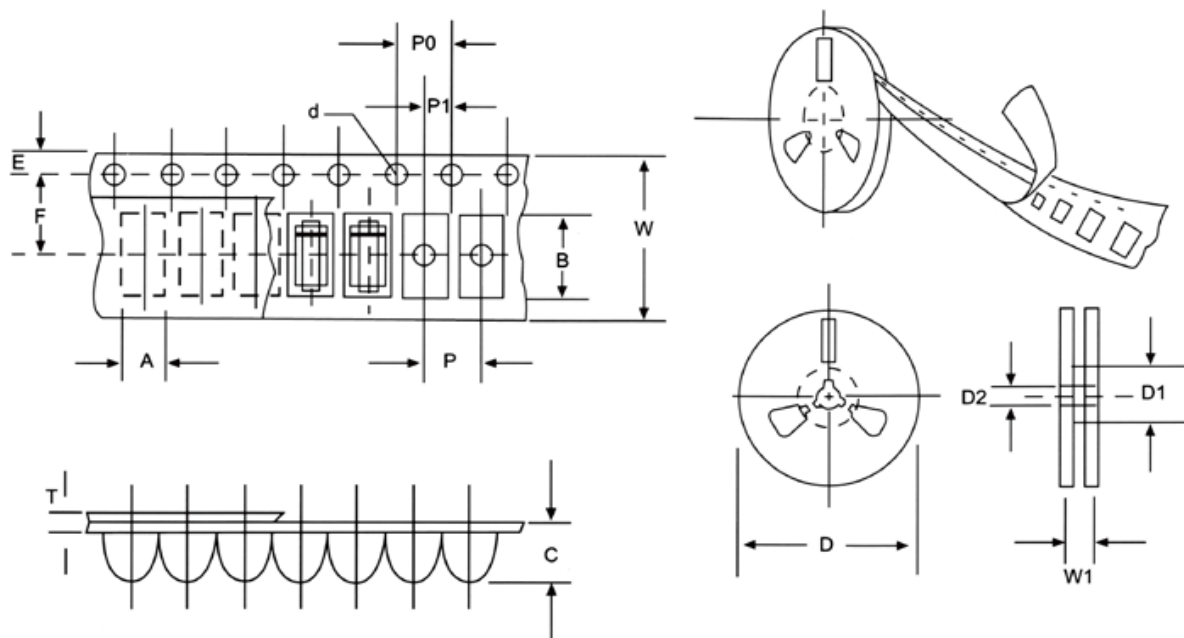


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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.