

SMAF Plastic-Encapsulate Diodes

Schottky Rectifier

Features

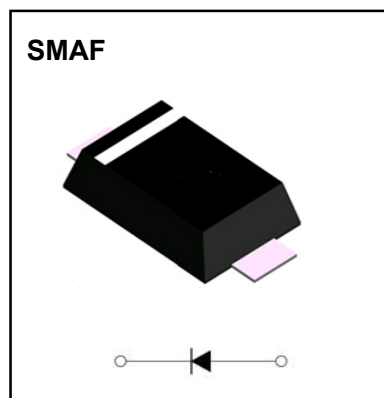
- I_o 3A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode
- Chip Size 1.27mm X 1.27mm

Applications

- Rectifier

Marking

- SS32F-SS320F : SS32-SS320



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS3								
				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	3.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a=25^{\circ}C$	70								
Junction Temperature	T_J	$^{\circ}C$		-55~+125			-55~+150					
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150								
IEC61000-4-2 ESD Voltage	V_{ESD}	KV	Air Model	± 15								
			Contact Model	± 8								

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

Item	Symbol	Unit	Test Condition	SS3							
				2F	3F	4F	5F	6F	8F	10F	15F
Peak Forward Voltage	V_F	V	$I_F=3.0A$	0.55		0.7		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$		0.5		0.1			
	I_{RRM2}			$T_a=100^{\circ}C$		10		5.0			
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	55							
	$R_{\theta J-L}$		Between junction and terminal	17							
	$R_{\theta J-C}$		Between junction and case	50							

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

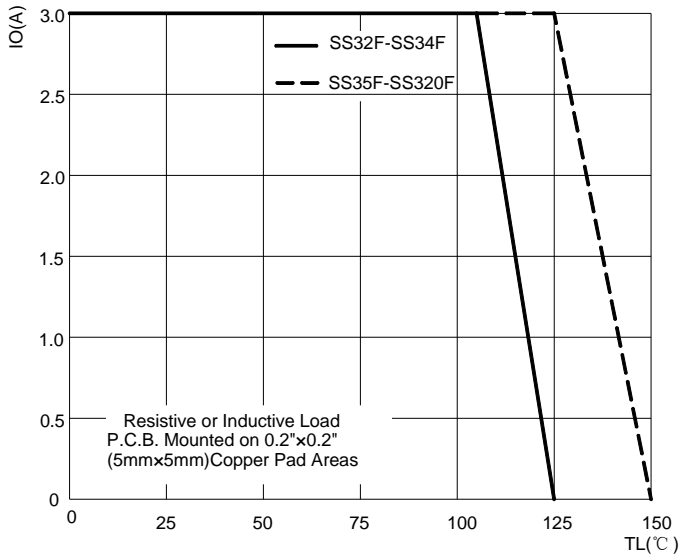


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

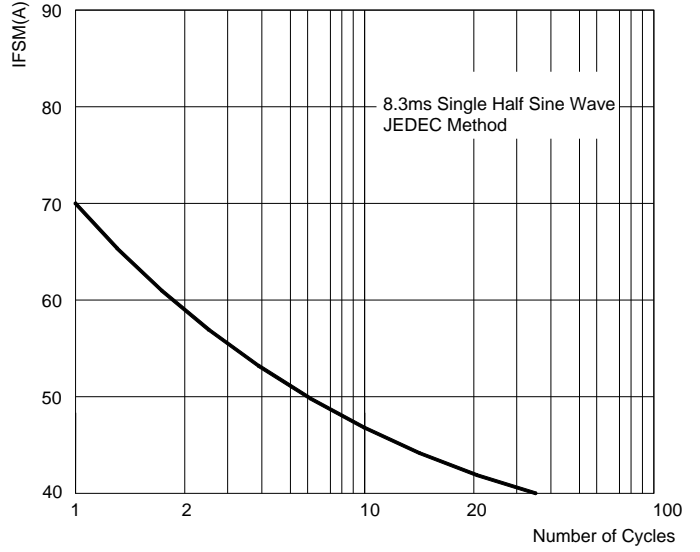


FIG.3: TYPICAL FORWARD CHARACTERISTICS

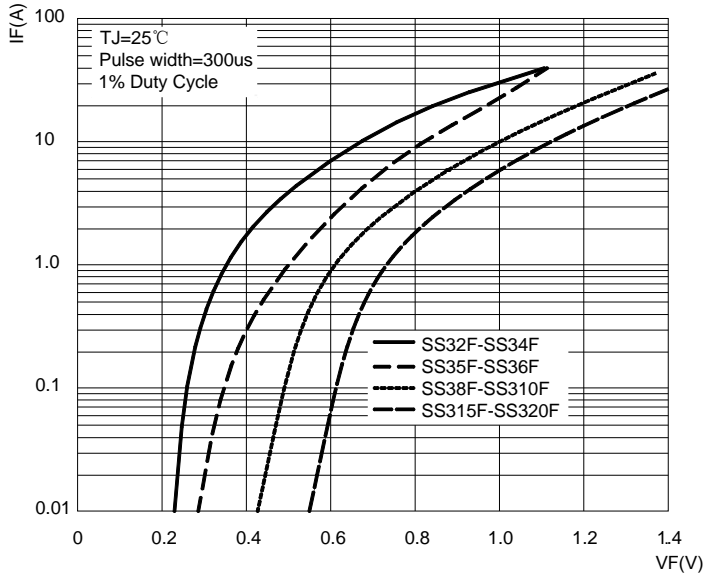
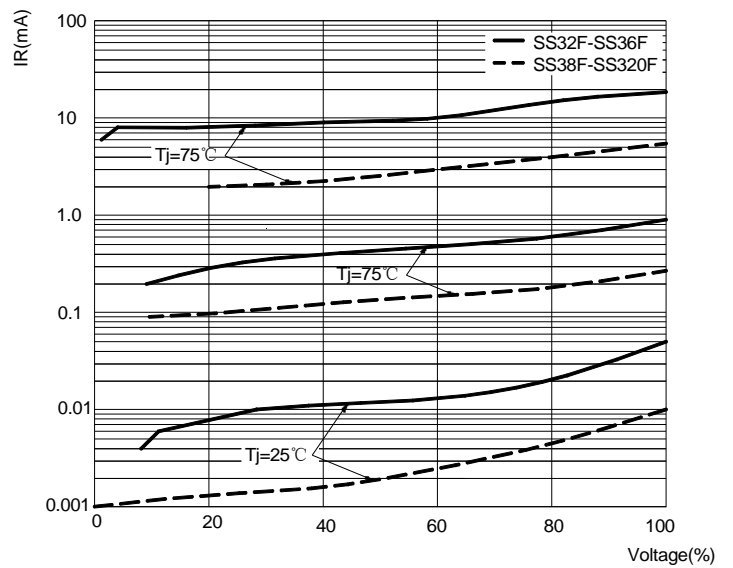
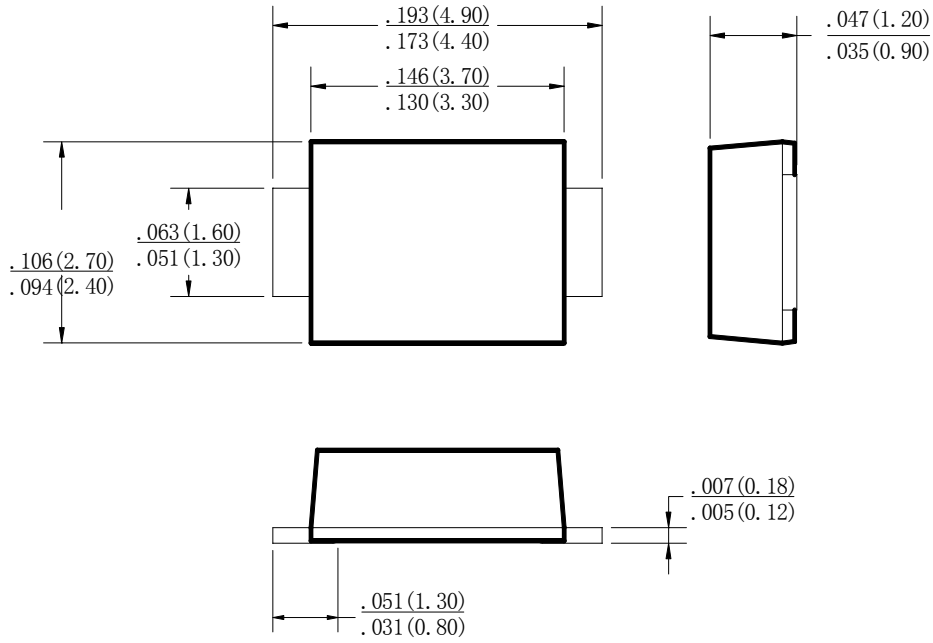


FIG.4: TYPICAL REVERSE CHARACTERISTICS

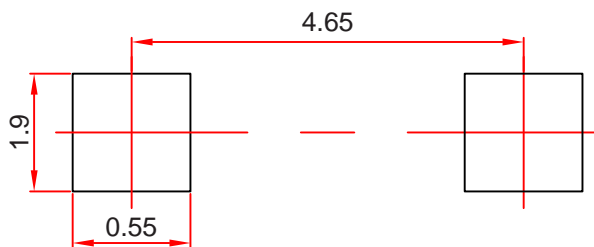


SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

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

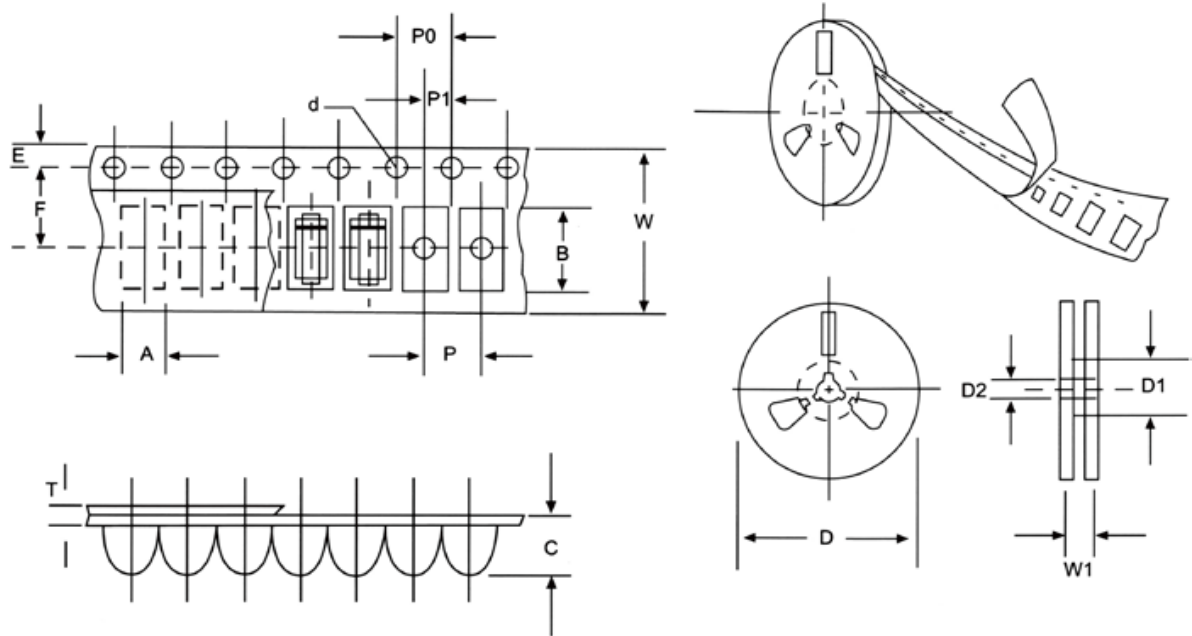
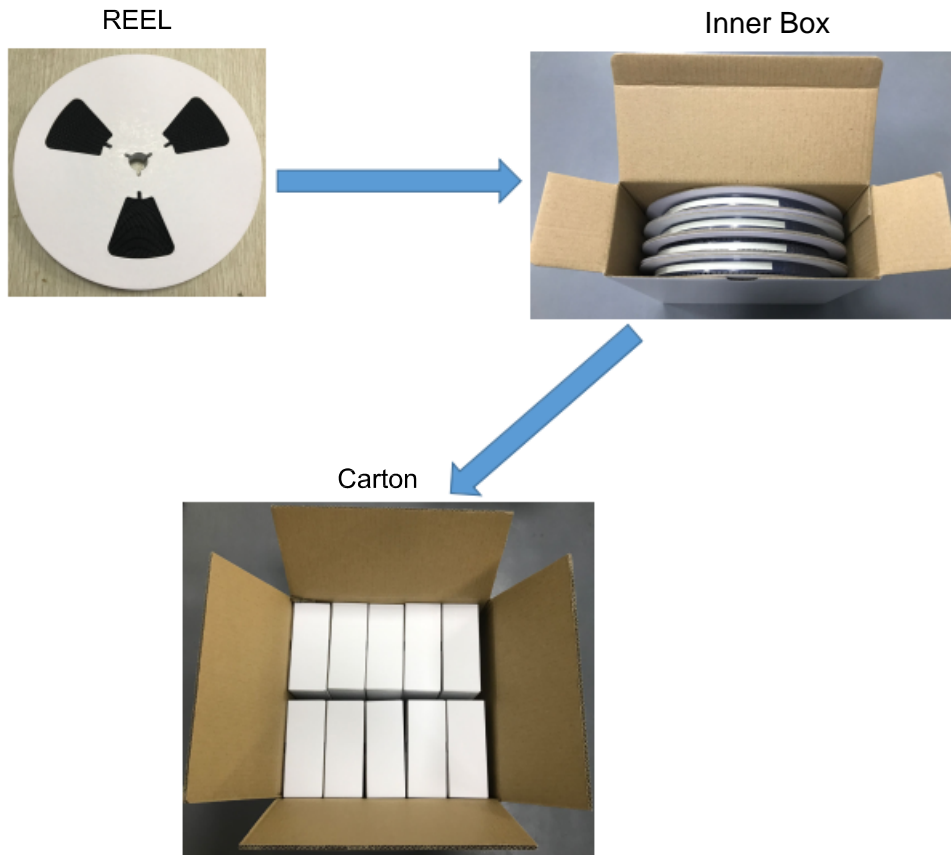


FIG:CONFIGURATION OF AXIAL TAPING

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	280/178+2.0(11/7.0+0.079)
Reel inner diameter	D1	8.0+0.2(0.315+0.008)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Sprocket 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.

SMAF Packing Information



REEL	Reel Size	Inner Box	Inner Box Size(mm)	Carton	Carton Size(mm)
3000 pcs	7 inch	12000pcs	180*182*70	120,000pcs	390*390*250