SOD123FL Plastic-Encapsulate Diodes

Schottky Rectifier

Features

- I_O 3A
- VRRM 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

SOD-123FL





Applications

- Rectifier

Marking

- DSS32-DSS320 ： S32-S320

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	DSS3								
				2	3	4	5	6	8	10	15	20
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 , Ta =25℃	70								
Junction Temperature	T_J	℃		-55~+125				-55~+150				
Storage Temperature	T_{STG}	℃		-55 ~ +150								

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Electrical Characteristics (T =25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		DSS3							
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V_F	V	I_F=3.0A		0.55			0.7		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta =25℃	0.5					0.1			
	I_{RRM2}			Ta =100℃	10			5.0					
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		55[1)]								
	$R_{\theta J-L}$		Between junction and terminal		17[1)]								

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

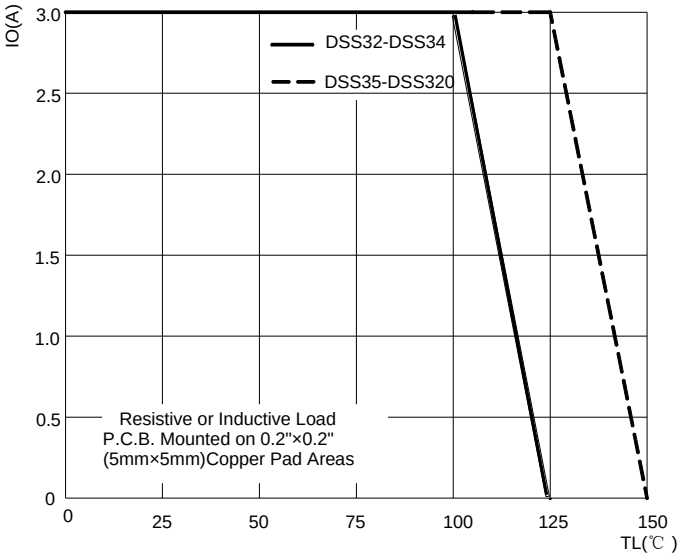


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

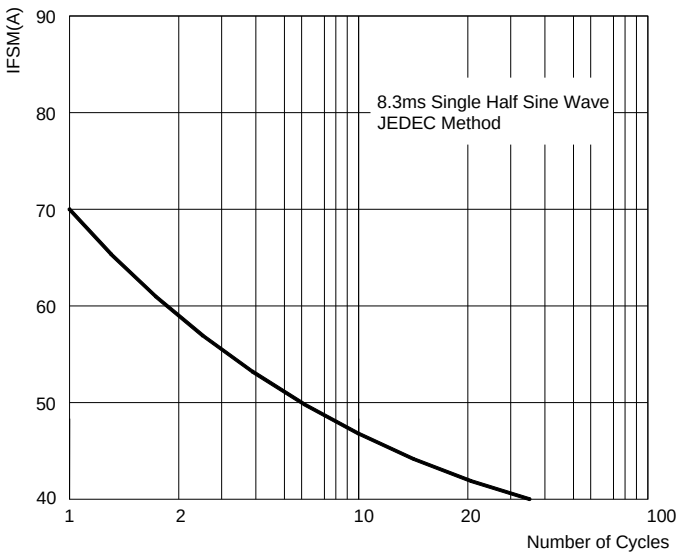


FIG.3: TYPICAL FORWARD CHARACTERISTICS

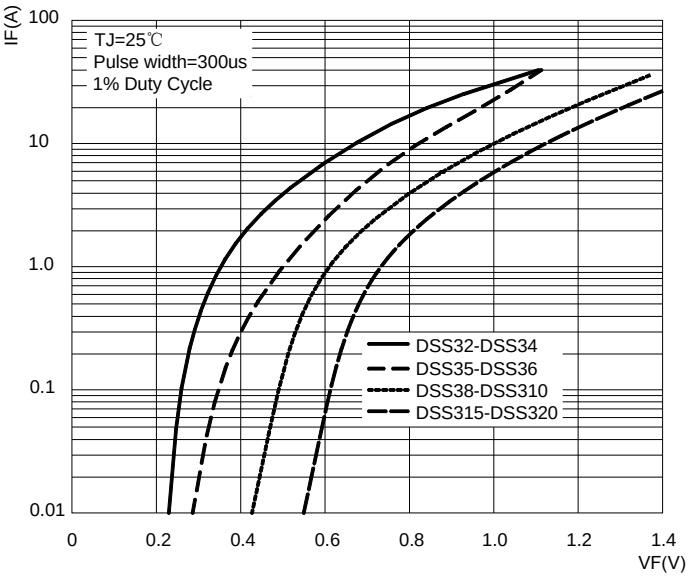
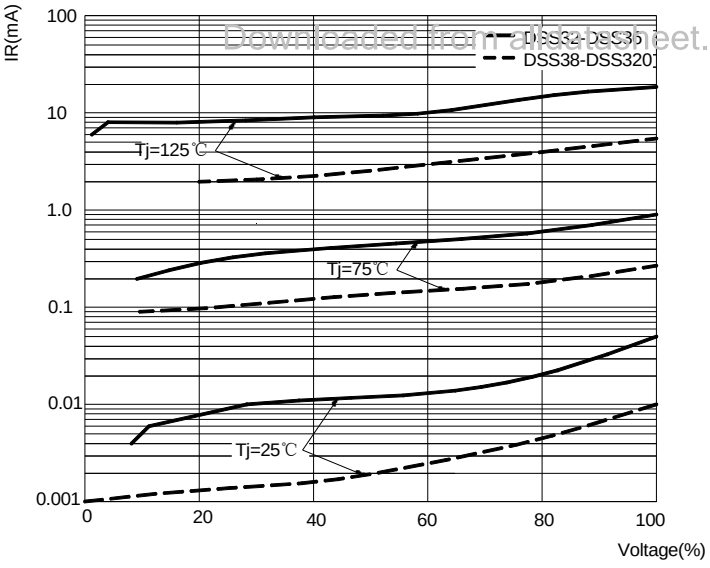
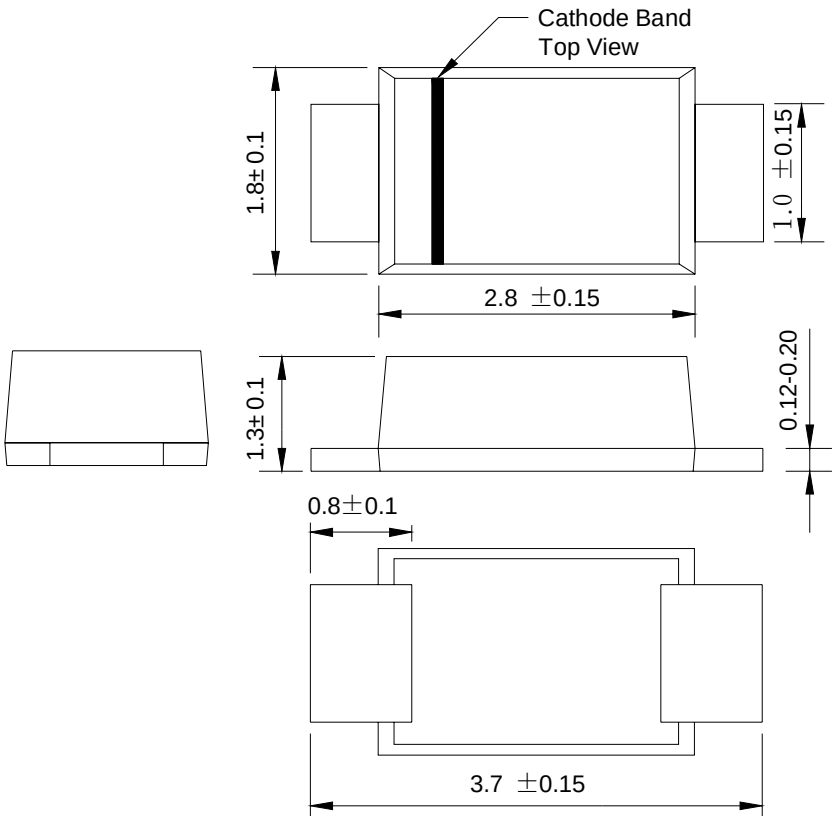


FIG.4：TYPICAL REVERSE CHARACTERISTICS



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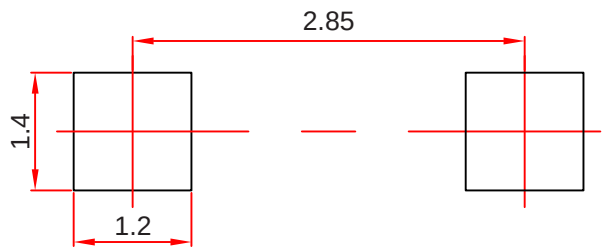
SOD-123FL Package Outline Dimensions



Dimensions in millimeters

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SOD-123FL Suggested Pad Layout



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

NOTICE

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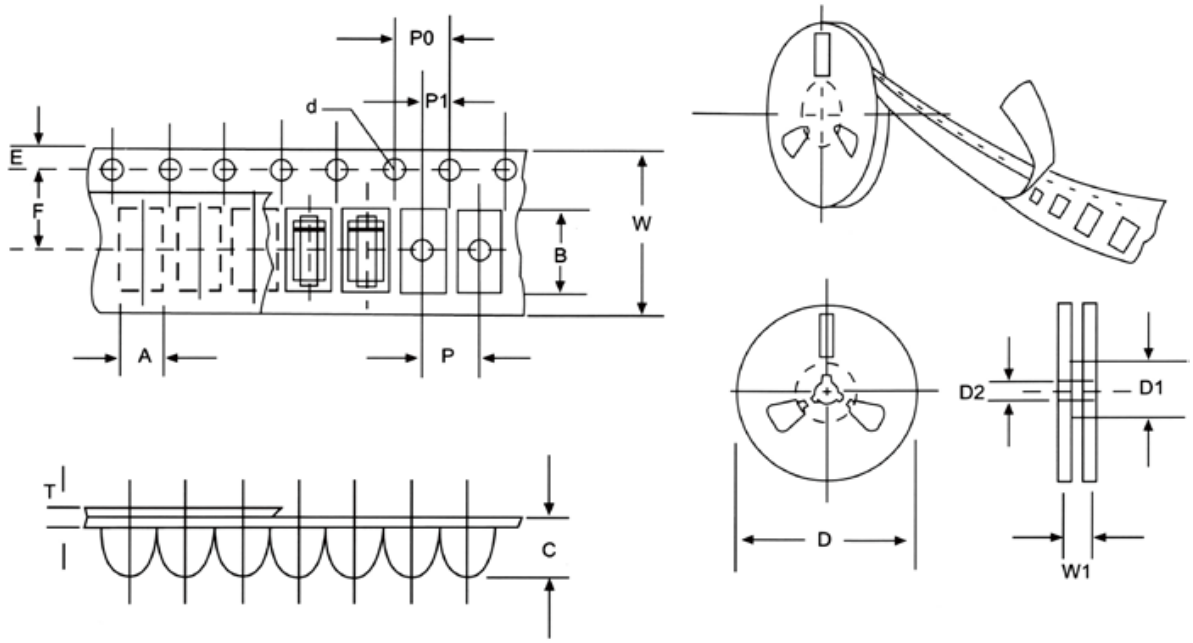


FIG:CONFIGURATION OF AXIAL TAPING

ITEM	SYMBOL	SOD123FL mm(inch)
Carrier width	A	2.05+0.1(0.081+0.004)
Carrier length	B	3.95+0.1(0.156+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)
Stroket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	3.50+0.1(0.138+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	0.21-0.25(0.008-0.010)
Totall tape thickness	T	8.0+0.3/-0.1(0.315+0.012/-0.004)
Tape width	W	2.0+0.1(0.079+0.004)
Reel width	W1	10.0+2.0(0.394+0.079)

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