HIGH DIODE

DSS22 THRU DSS220

RoHS COMPLIANT

HALOGEN FREE

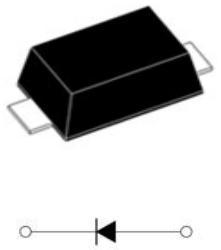
SOD-123FL Plastic-Encapsulate Diodes

Schottky Rectifier

Features

- I_O 2A
- VRRM 20V-200V
- Low forward voltage drop
- High surge current capability
- Metal silicon junction, majority carrier conduction

SOD-123FL



Mechical Data

- Case: SOD-123FL molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202, Method 208
- Polarity: Color band denotes cathode end

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	DSS 22	DSS 23	DSS 24	DSS 25	DSS 26	DSS 28	DSS 210	DSS 215	DSS 220
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
Maximum DC Blocking Voltage	V_{DC}	V		20	30	40	50	60	80	100	150	200
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, TL(Fig.1)	2.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , Ta =25℃	50								
Junction Temperature	T_J	℃		-55~+125			-55~+150					
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		DSS 22	DSS 23	DSS 24	DSS 25	DSS 26	DSS 28	DSS 210	DSS 215	DSS 220
Peak Forward Voltage	V_F	V	I_F=2.0A		0.55			0.70		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		85								
	$R_{\theta J-L}$		Between junction and terminal		23								
	$R_{\theta J-C}$		Between junction and case		15								
Juction Capacitance (Typical)	Cj	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.		103			95		60		32	

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

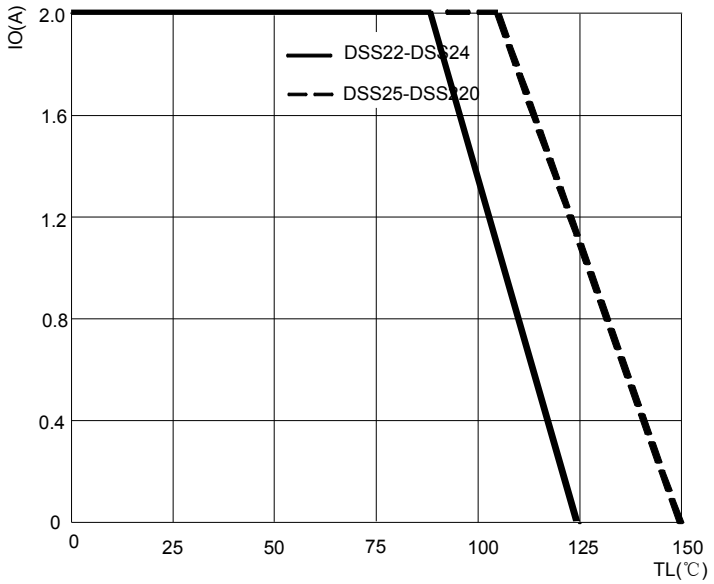


FIG2:Surge Forward Current Capadility

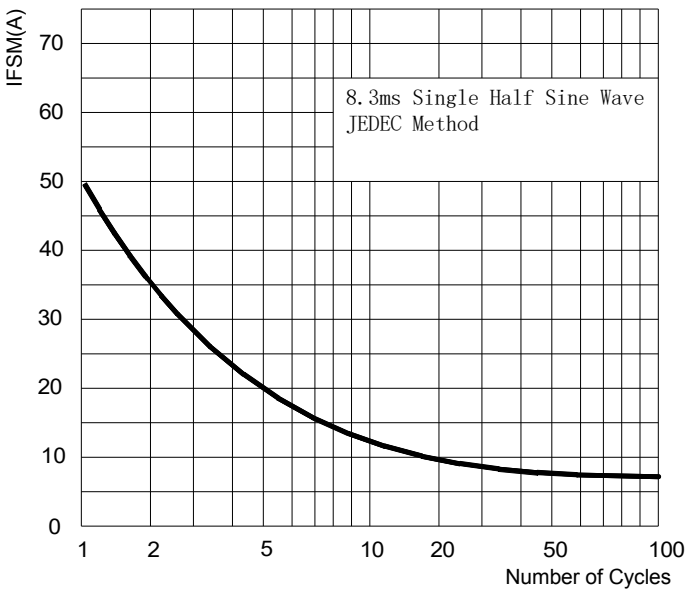


FIG.3: TYPICAL FORWARD CHARACTERISTICS

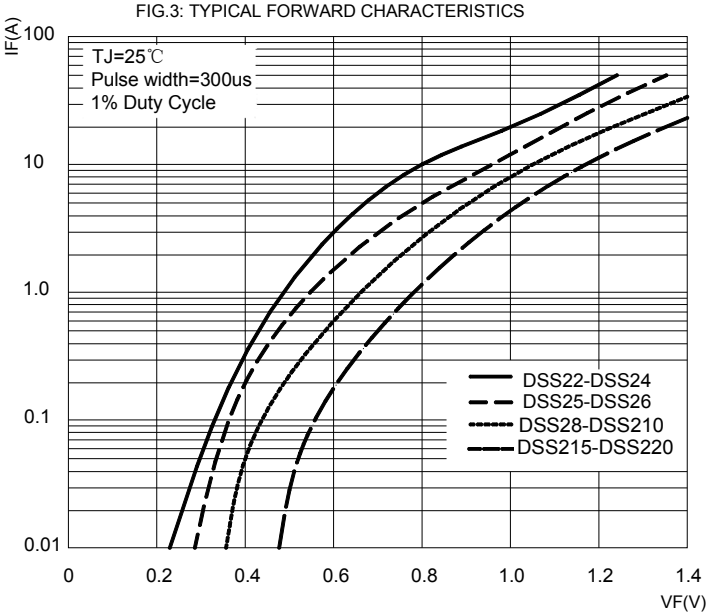
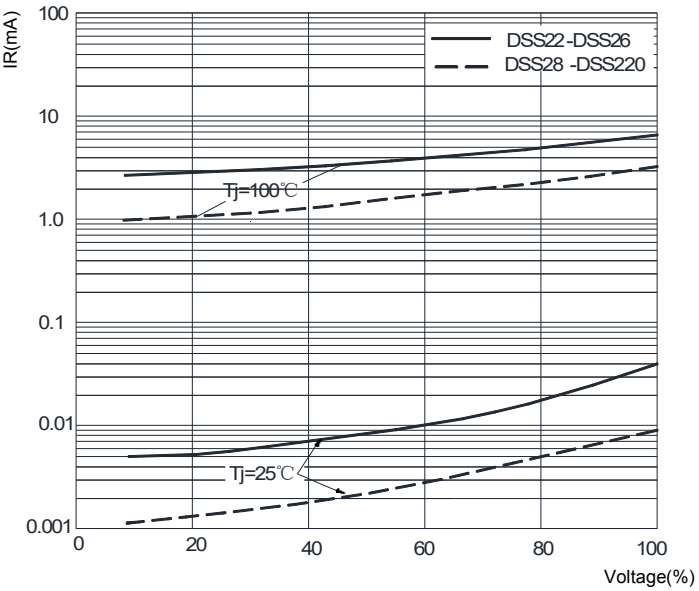
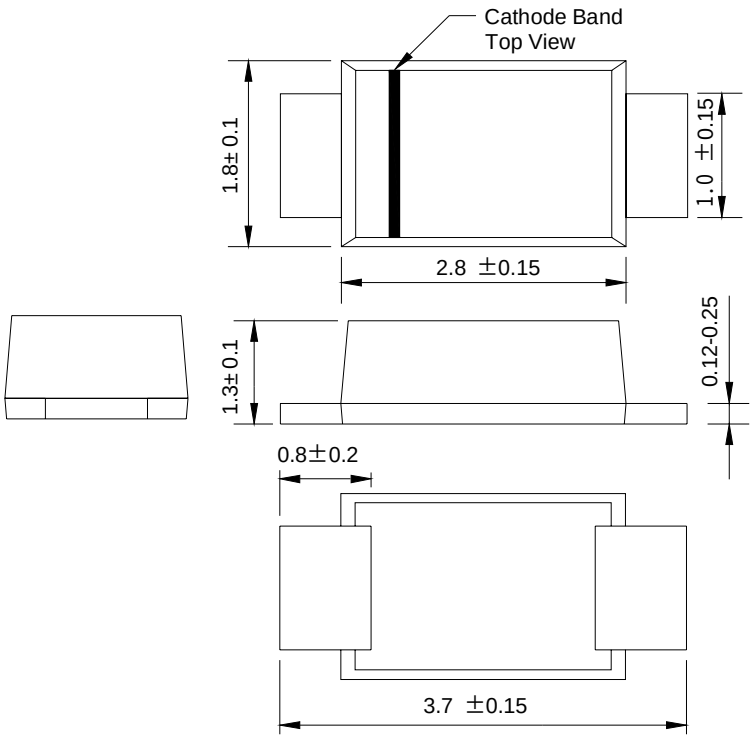


FIG 4：TYPICAL REVERSE CHARACTERISTICS

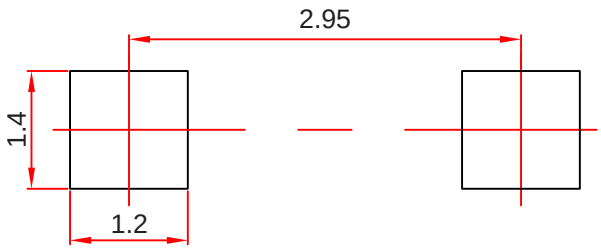


SOD-123FL Package Outline Dimensions



Dimensions in millimeters

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.

Ordering Information

Part Number	Package	Shipping Quantity
DSS22-DSS220	SOD-123FL	3000/tape&Reel

Marking Diagram

X：From 2 To 20

Reel Taping Specifications For Surface Mount Devices-SOD-123FL

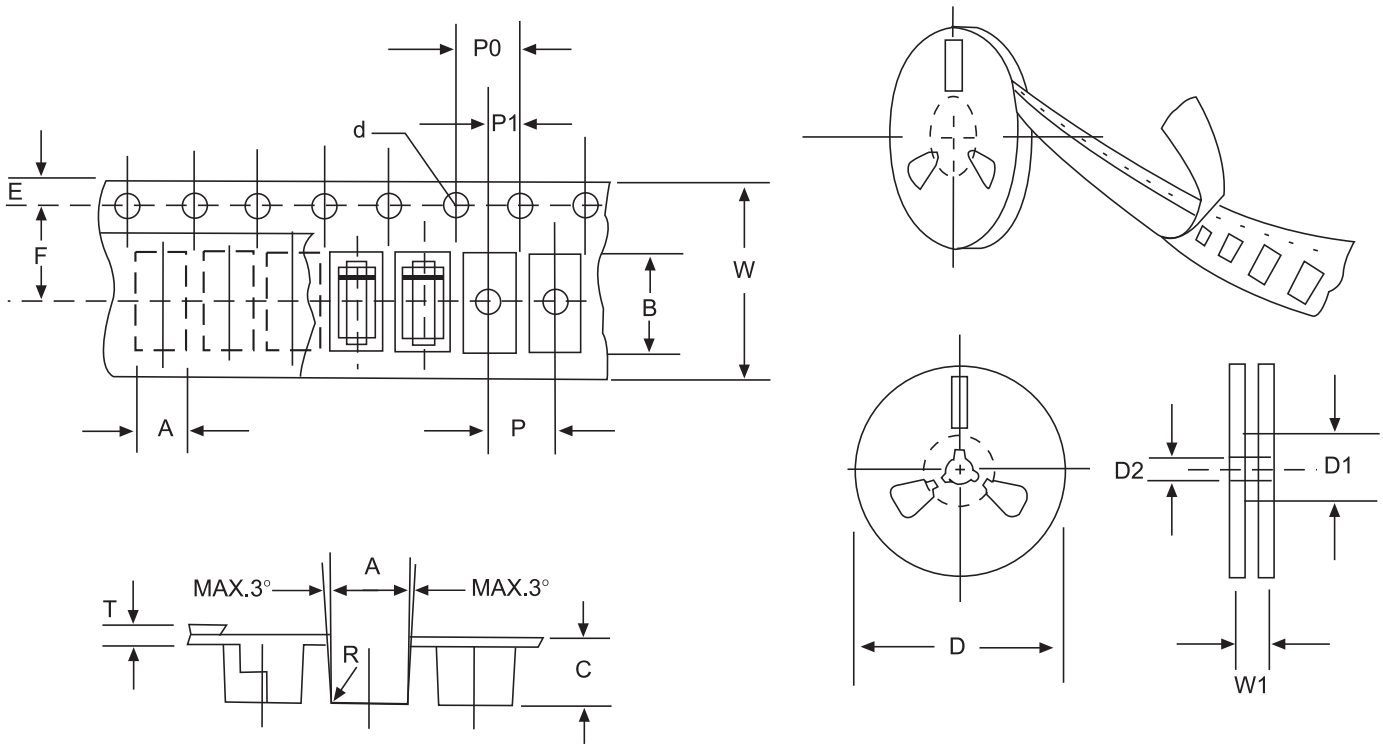


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SOD-123FLmm(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	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)
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	2.0±0.1(0.079±0.004)
Totall tape thickness	T	0.21±0.25(0.008±0.010)
Tape width	W	8.0±0.2(0.315±0.008)
Reel width	W1	10.0±2.0(0.394±0.079)

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