

SOD123 Plastic-Encapsulate Diodes

Small Signal Fast Switching Diodes

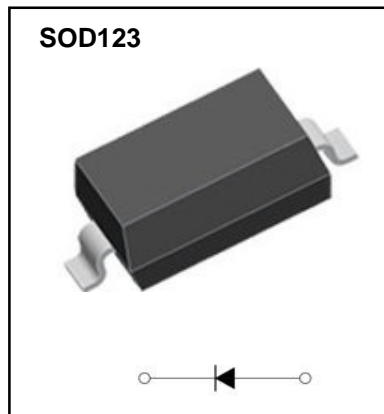
Features

- V_R 75V
- I_{FAV} 150mA

Applications

- Extreme fast switches

Marking: T4



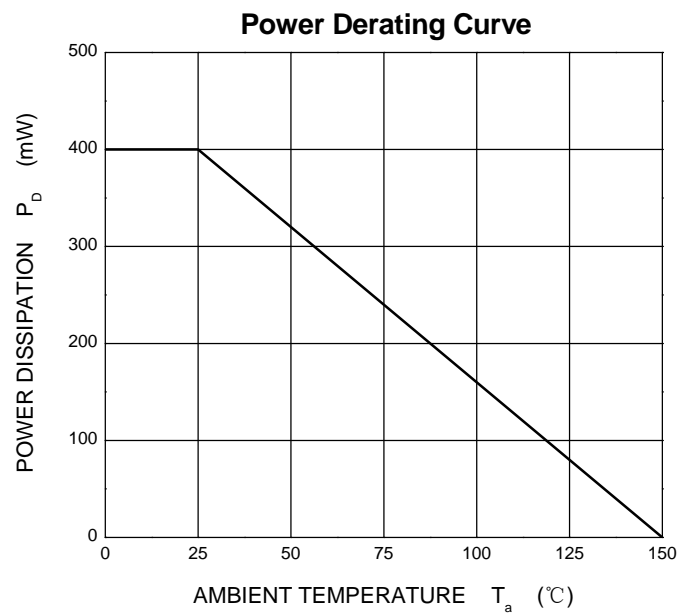
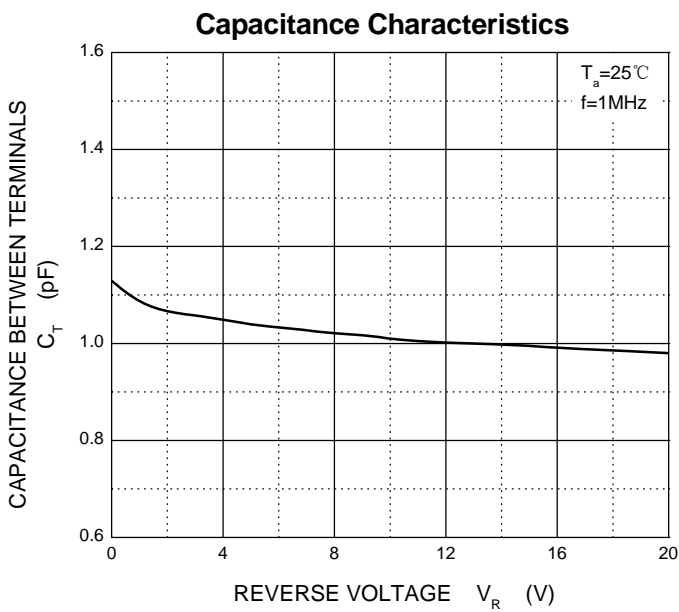
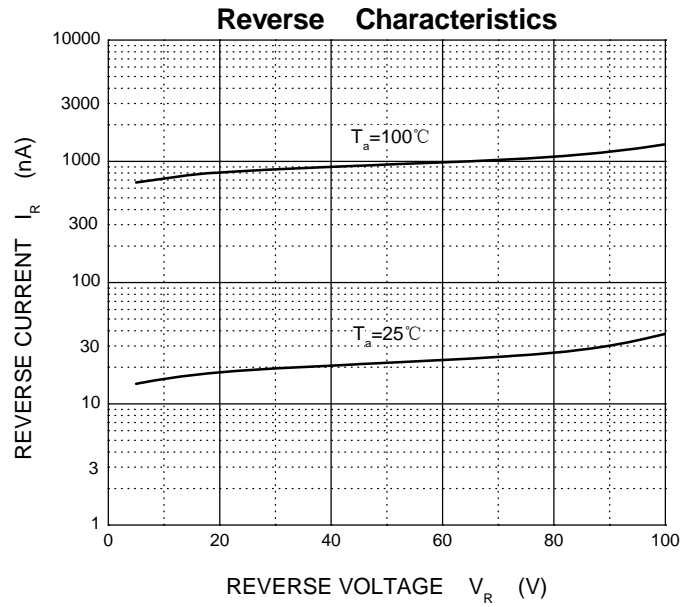
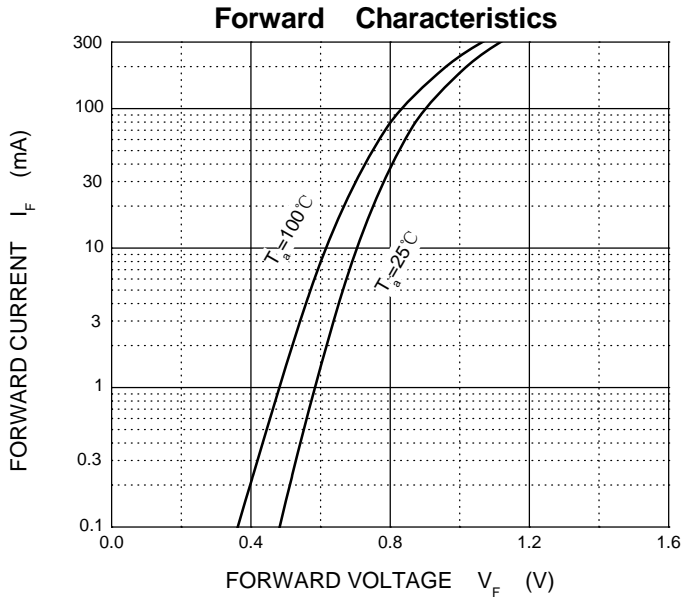
Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit
Non-Repetitive peak reverse voltage	VRM	V		100
Peak repetitive peak reverse voltage Working peak DC Blocking voltage	VRRM	V		75
RMS Reverse voltage	VR(RMS)	V		53
Forward continuous current	IFM	mA		300
Average rectified output current	IO	mA		150
Peak forward current	IFSM	A	Pulse width=1 us Pulse width=1 s	2.0 1.0
Power dissipation	PD	mW		400
Thermal resistance junction to ambient	$R_{\theta JA}$	K/W		250
Junction temperature	TJ	°C		150
Storage temperature	TSTG	°C		-65 to +150

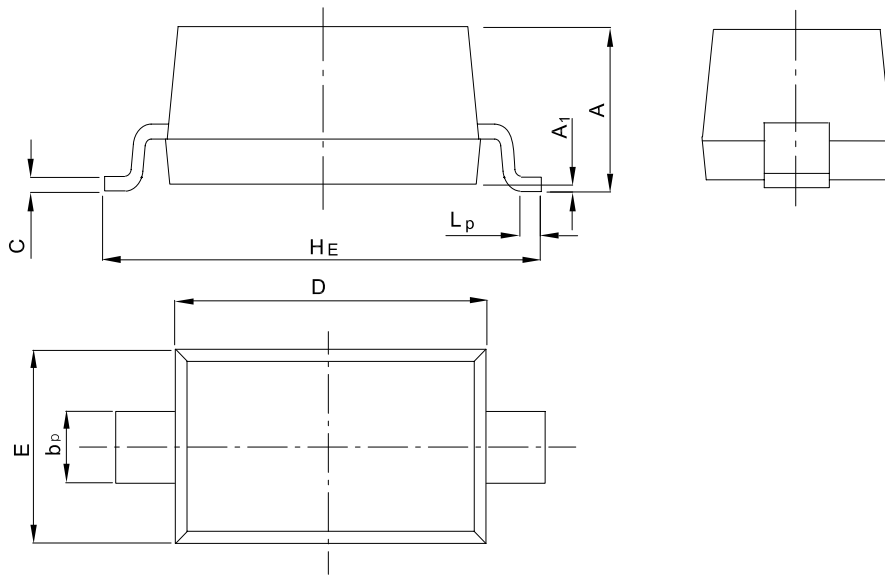
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Max
Forward Voltage	VF	V	IF=1.0mA		0.715
			IF=10mA		0.855
			IF=50mA		1.0
			IF=150mA		1.25
Reverse Leakage Current	IR1	nA	VR=20V		25
	IR2	μA	VR=75V		1
Capacitance	CT	pF	VR=0V, f=1MHz		2
Reverse Recovery Time	trr	ns	IF=IR=10mA, Irr=0.1*IR, RL=100 Ω		4.0

Typical Characteristics

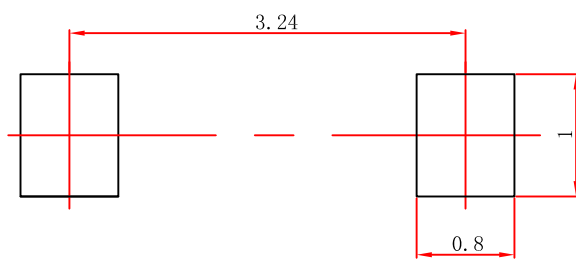


SOD-123 Package Outline Dimensions



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20

SOD-123 Suggested Pad Layout



Note:

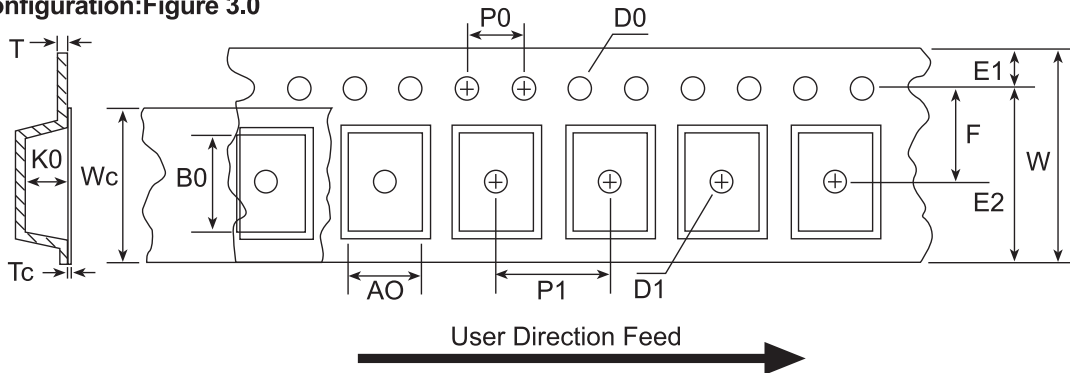
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

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.

Reel Taping Specifications For Surface Mount Devices-SOD123

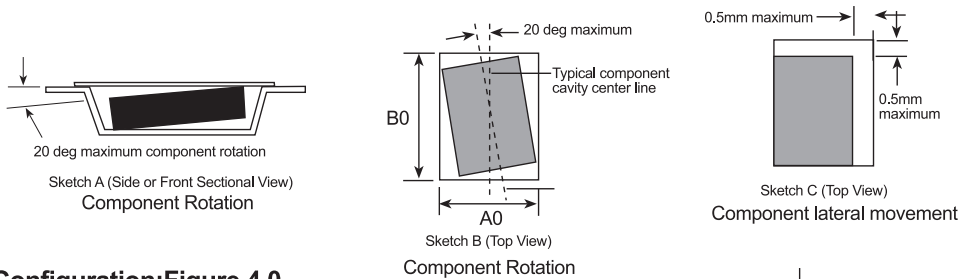
SOD123 Embossed Carrier Tape Configuration: Figure 3.0



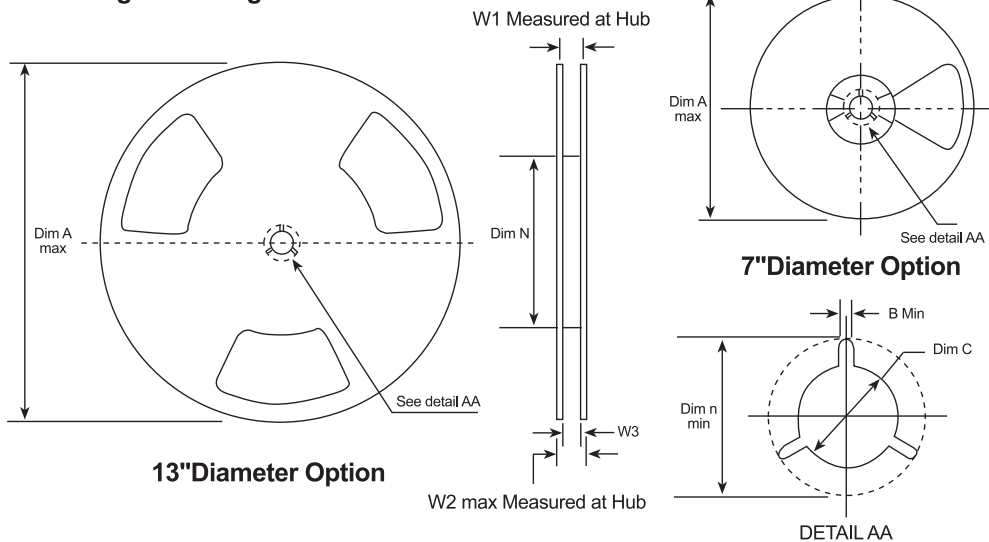
Dimensions are millimeter

Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD123 (8mm)	1.85 +/-0.10	3.94 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.50 +/-0.10	0.20 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

Notes: A0, B0 and K0 dimensions are determined with respect to the EW Jedec RS-481 rotational and lateral movement requirements (see sketches A, B and C).



SOD123 Reel Configuration: Figure 4.0



Dimensions are in inches and millimeter

Type Size	Reel Option	Dim A	Dim B	Dim C	Dim D	Dim N	Dim W1	Dim W2	Dim W3 (LSL-USL)
8mm	7" Dia	7.00 177.8	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	2.165 55	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9
8mm	13" Dia	13.00 330	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	4.00 100	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9