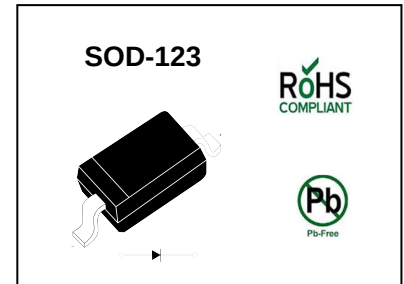


PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Silicon Epitaxial Planar Switching Diode

Fast Switching Diode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current (at $t = 1\ \mu\text{s}$)	I_{FSM}	4	A
Power Dissipation	P_d	400	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\ \text{mA}$ at $I_F = 10\ \text{mA}$ at $I_F = 100\ \text{mA}$ at $I_F = 150\ \text{mA}$	V_F	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80\ \text{V}$ at $V_R = 20\ \text{V}$ at $V_R = 75\ \text{V}$, $T_J = 150^\circ\text{C}$ at $V_R = 25\ \text{V}$, $T_J = 150^\circ\text{C}$	I_R	- - - -	100 25 50 30	nA nA μA μA
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5\ \text{V}$, $f = 1\ \text{MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10\ \text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\ \Omega$	t_{rr}	-	4	ns

Typical Characteristics

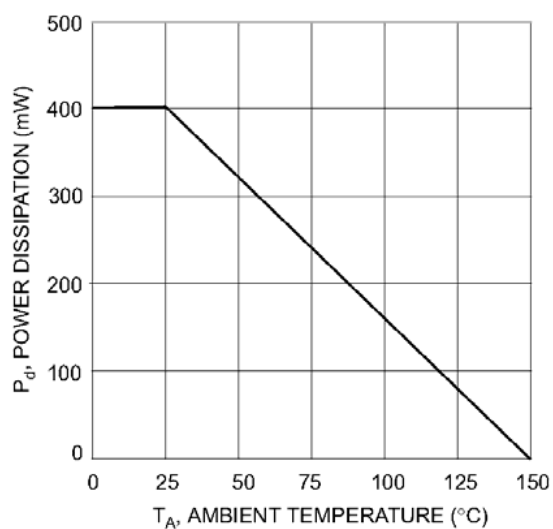


Fig. 1 Power Derating Curve

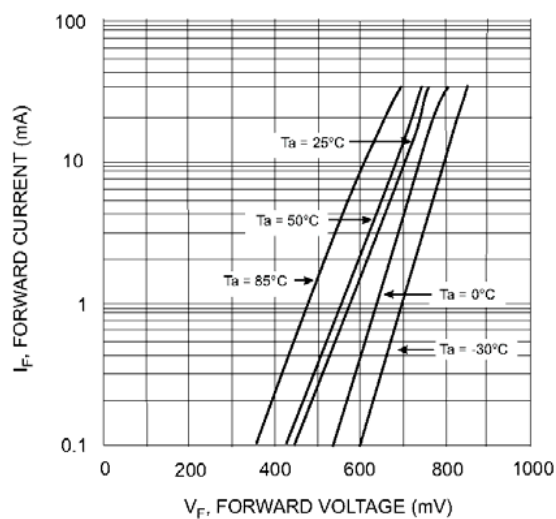


Fig. 2 Typical Forward Characteristics

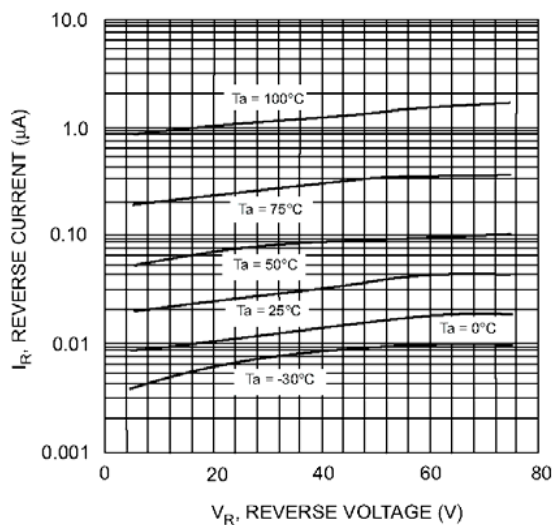


Fig. 3 Typical Reverse Characteristics

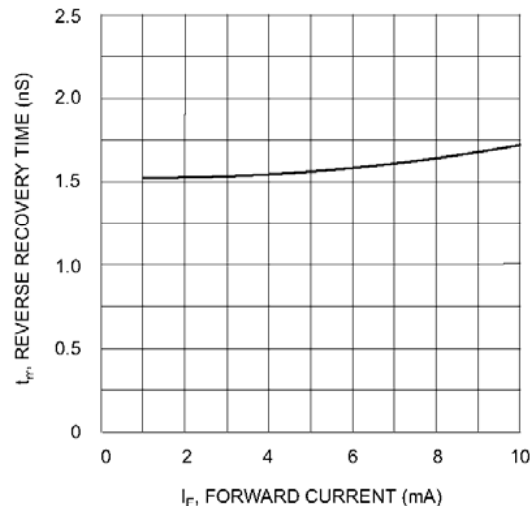


Fig. 4 Reverse Recovery Time vs. Forward Current

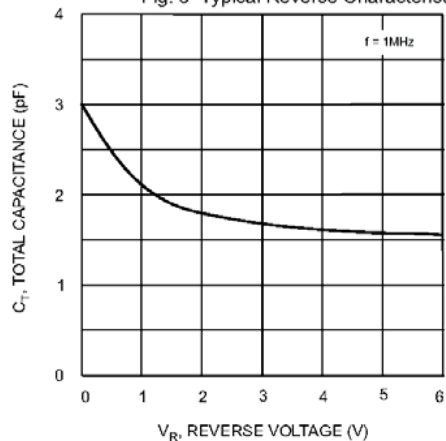
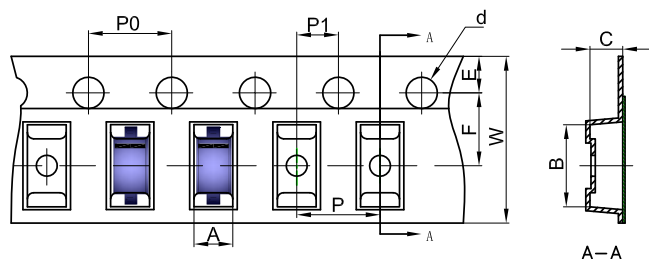


Fig. 5 Total Capacitance vs. Reverse Voltage

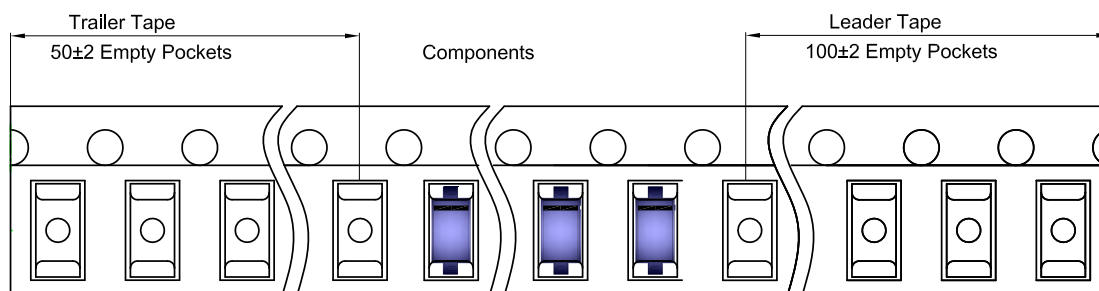
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

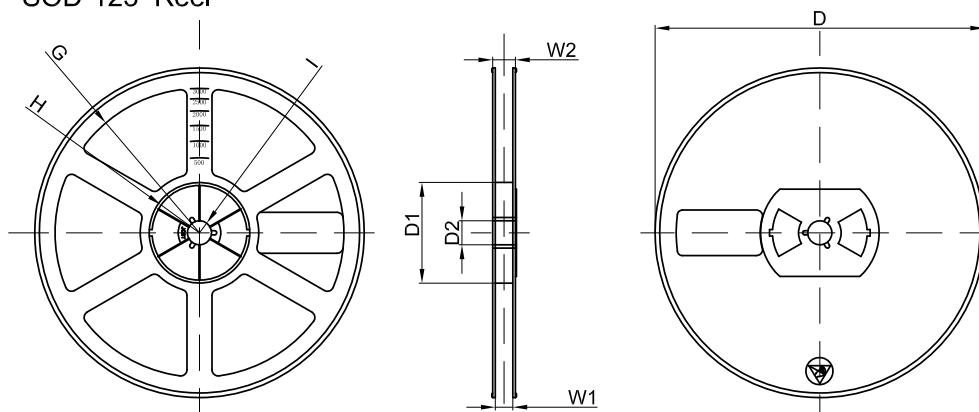


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer

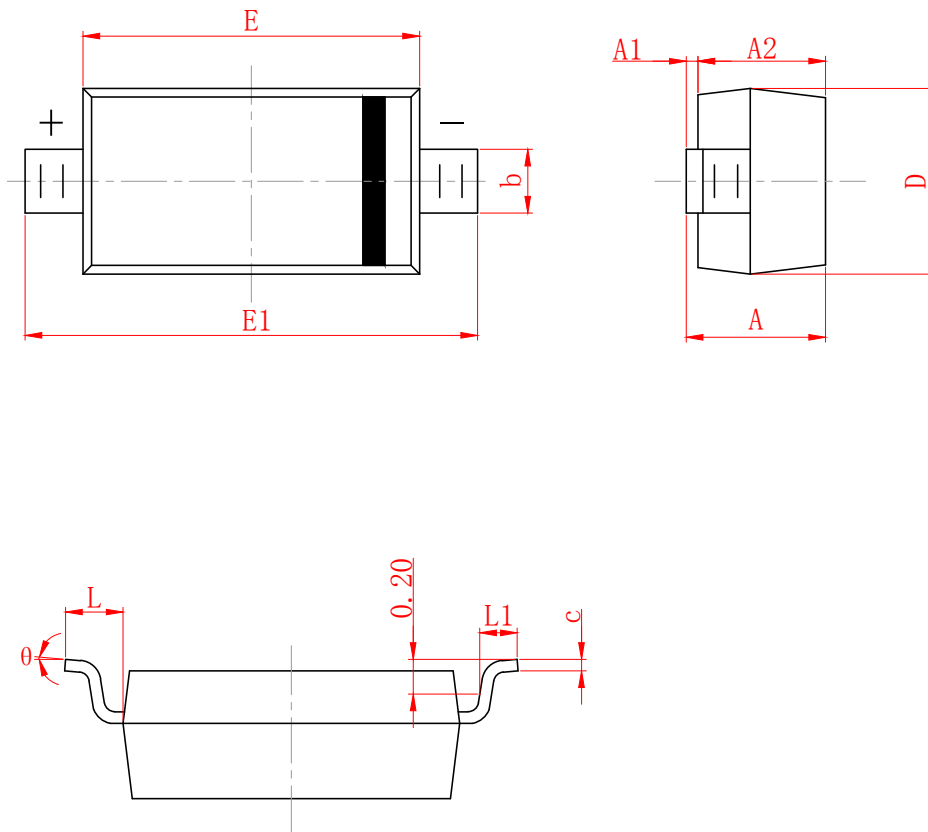


SOD-123 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	



SYMBOL	MILLIMETER	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.008	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 (REF)	
L1	0.250	0.450
θ	0°	8°

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