

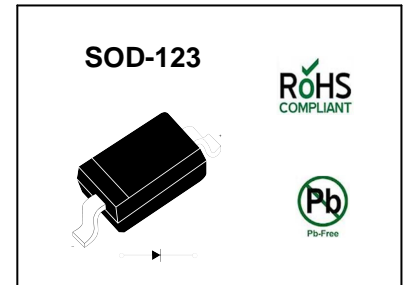
PINNING

Surface Mount Schottky Barrier Diodes

Features

- Low forward voltage
- Low reverse capacitance

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter		Symbol	Value	Unit
Peak Repetitive Reverse Voltage	SD101AW	V_{RRM}	60	V
	SD101BW		50	
	SD101CW		40	
Reverse Voltage	SD101AW	V_R	60	V
	SD101BW		50	
	SD101CW		40	
Forward Continuous Current		I_{FM}	15	mA
Power Dissipation		P_d	400	mW
Non-Repetitive Peak Forward Surge Current	at t = 1 s	I_{FSM}	50	mA
	at t = 10 μs		2	A
Operating and Storage Temperature Range		T_j, T_{stg}	- 65 to + 125	°C

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

Parameter	Symbol	Min.	Max.	Unit		
Reverse Breakdown Voltage at I _R = 10 μA	SD101AW SD101BW SD101CW	V _{(BR)R}	60 50 40	- - -	V	
Forward Voltage at I _F = 1 mA	SD101AW SD101BW SD101CW	V _F	- - -	0.41 0.4 0.39	V	
at I _F = 15 mA	SD101AW SD101BW SD101CW		- - -	1 0.95 0.9		
Reverse Current at V _R = 50 V	SD101AW		-	200		nA
at V _R = 40 V	SD101BW		-	200		
at V _R = 30 V	SD101CW		-	200		
Total Capacitance at V _R = 0 V, f = 1 MHz	SD101AW SD101BW SD101CW	C _T	- - -	2 2.1 2.2	pF	
Reverse Recovery Time at I _F = I _R = 5 mA , I _{rr} = 0.1X I _R , R _L = 100 Ω		t _{rr}	-	1	ns	

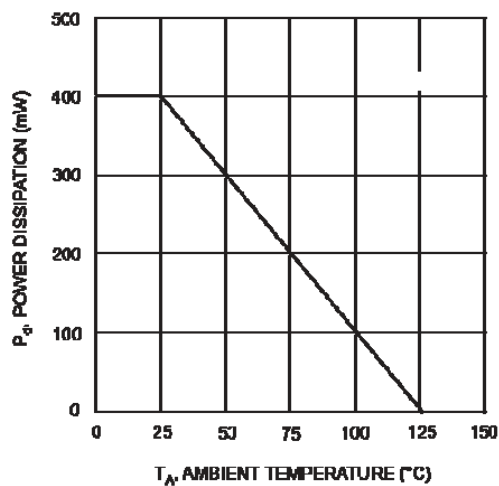


Fig. 1 Power Derating Curve

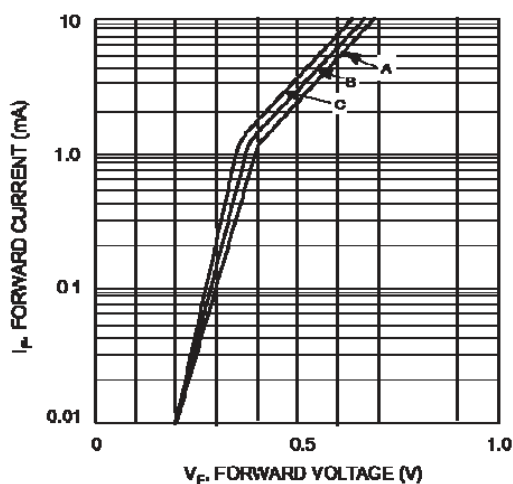


Fig. 2 Typical Forward Characteristic

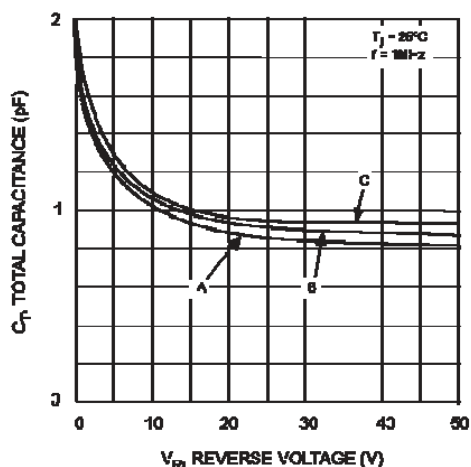


Fig. 3 Typical Total Capacitance vs Reverse Voltage

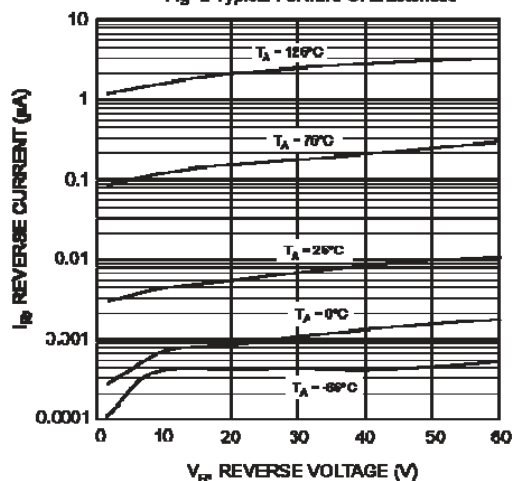
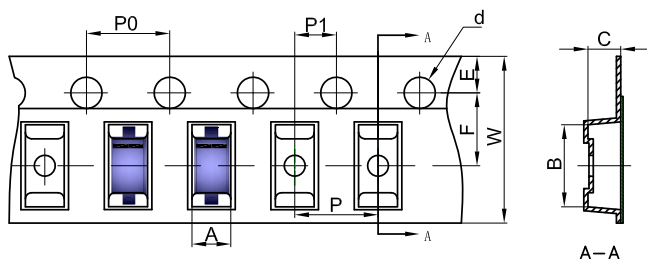


Fig. 4 Typical Reverse Characteristics

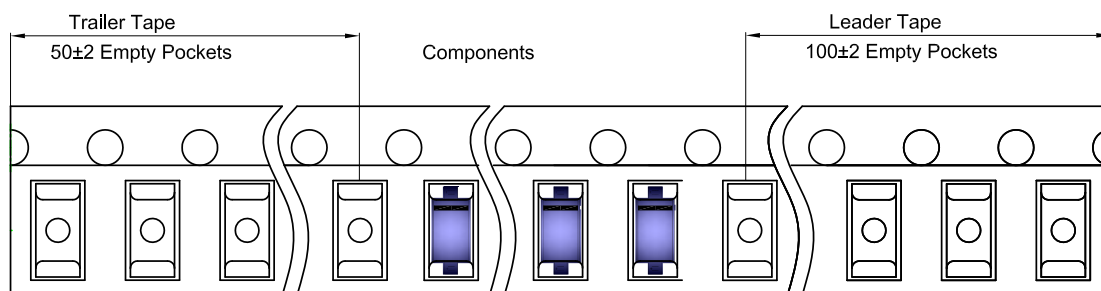
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

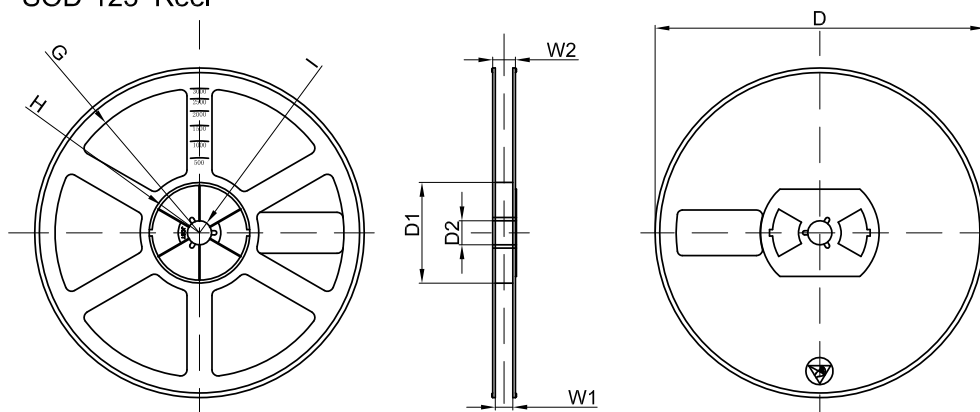


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer

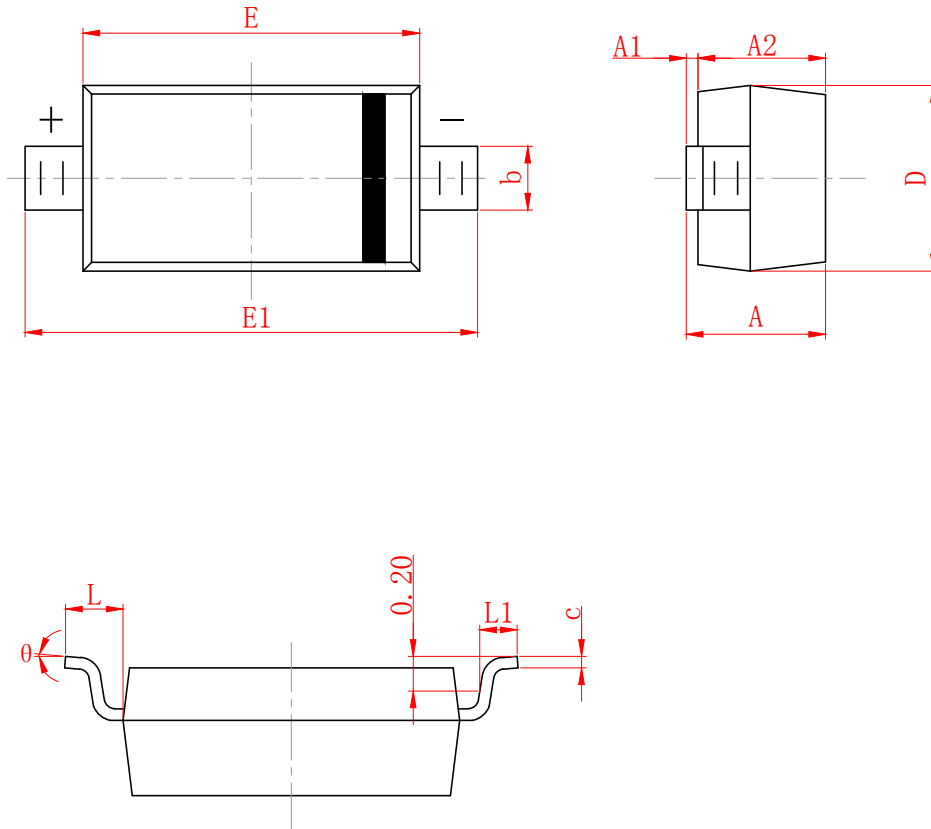


SOD-123 Reel



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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