

Surface Mount Schottky Barrier Diodes

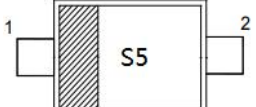
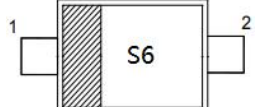
PINNING

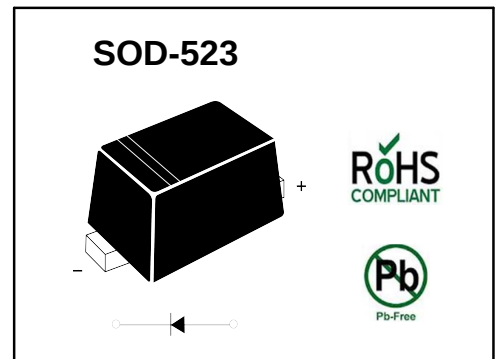
PIN	DESCRIPTION
1	Cathode
2	Anode

Features

- Low Forward Voltage

MARKING

SD103AWT:S4	SD103BWT:S5	SD103CWT:S6
		



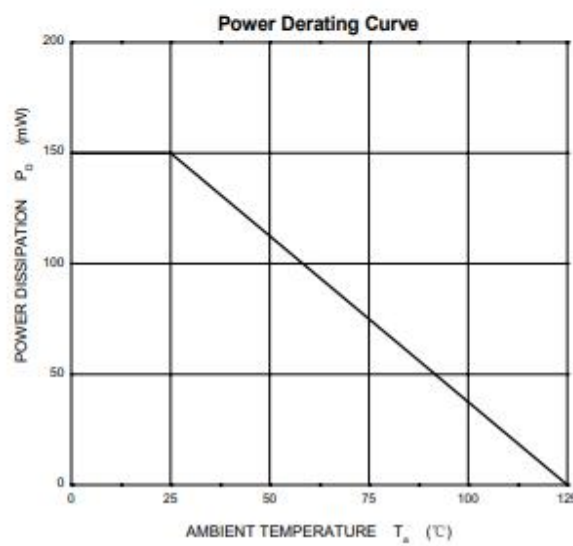
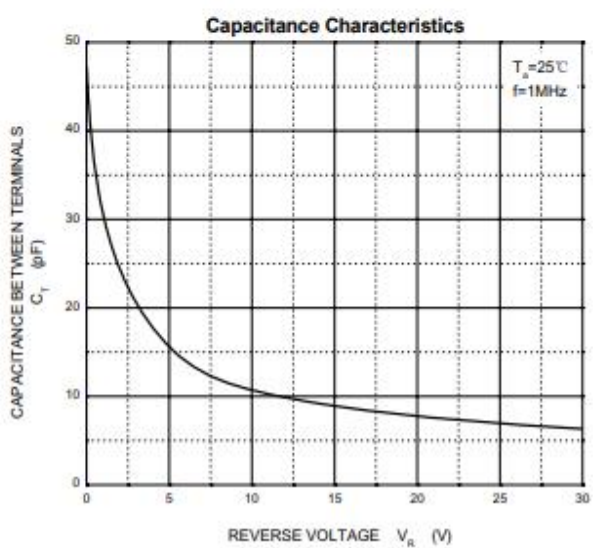
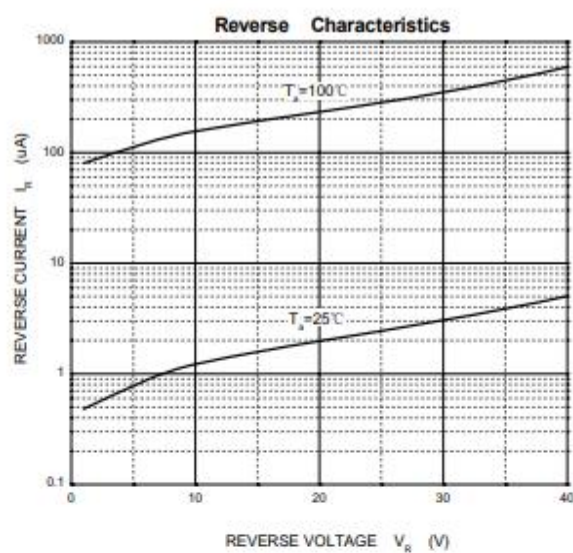
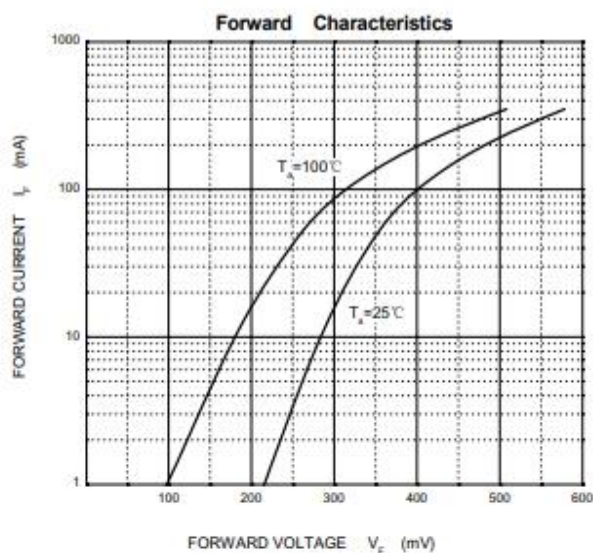
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	SD103AWT SD103BWT SD103CWT	V
		40 30 20	
Reverse Voltage	V_R	SD103AWT SD103BWT SD103CWT	V
		40 30 20	
Average Forward Rectified Current	$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$	I_{FSM}	2	A
Power Dissipation	P_{tot}	200	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 125	$^\circ\text{C}$

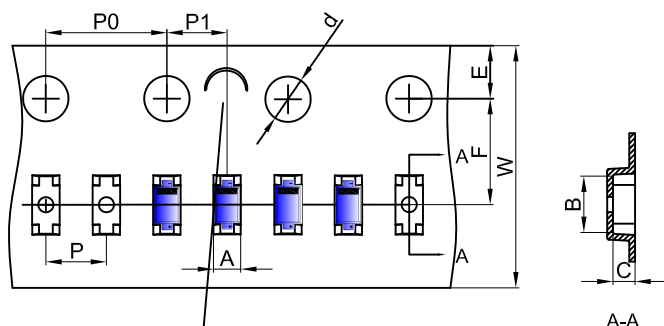
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\mu\text{A}$	$V_{(BR)R}$	SD103AWT SD103BWT SD103CWT	-	-	V
		40 30 20			
Reverse Leakage Current at $V_R = 30\text{V}$ at $V_R = 20\text{V}$ at $V_R = 10\text{V}$	I_R	SD103AWT SD103BWT SD103CWT	-	5 5 5	μA
Forward Voltage at $I_F = 20\text{mA}$ at $I_F = 200\text{mA}$	V_F		-	0.37 0.6	V
Total Capacitance at $V_R = 0\text{V}$, $f = 1\text{MHz}$	C_T	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\Omega$	t_{rr}	-	10	-	ns

Typical Characteristics



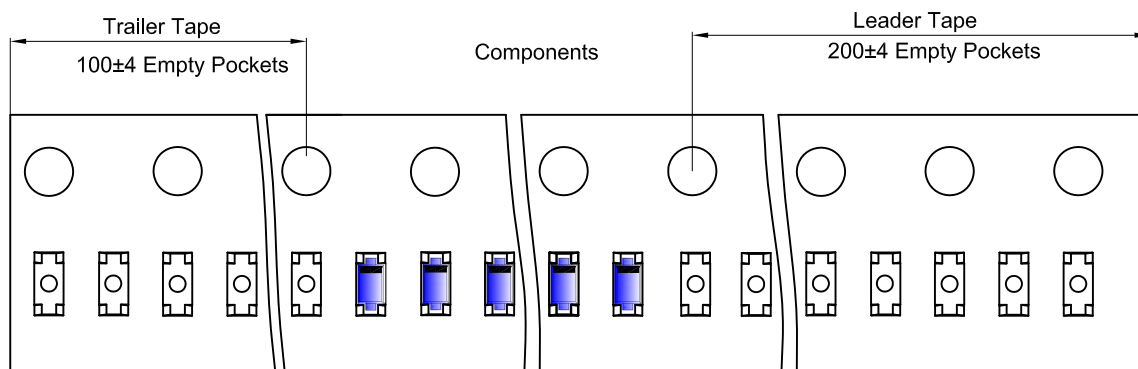
SOD-523 Embossed Carrier Tape



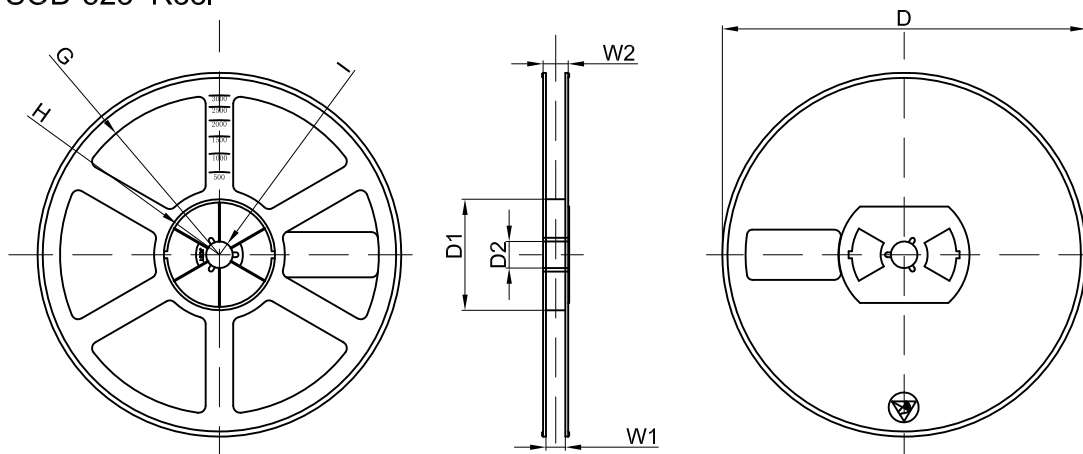
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

SOD-523 Tape Leader and Trailer



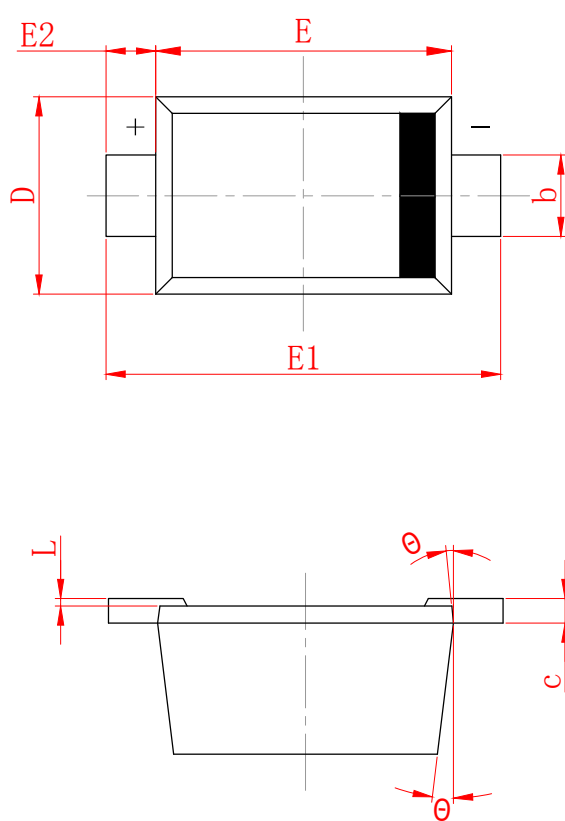
SOD-523 Reel



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)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	

SOD-523 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.530	0.730
A1	0.500	0.700
b	0.280	0.380
c	0.080	0.150
D	0.750	0.850
E	1.100	1.300
E1	1.500	1.700
E2	0.200 REF	
L	0.010	0.070
θ	7° REF	

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