

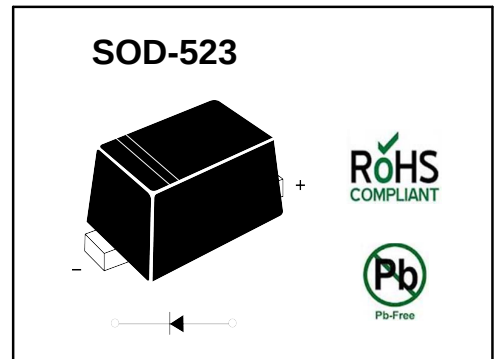
BAND SWITCHING DIODE

Features

- Very small plastic SMD package
- Low diode capacitance
- Low diode forward resistance
- Small inductance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



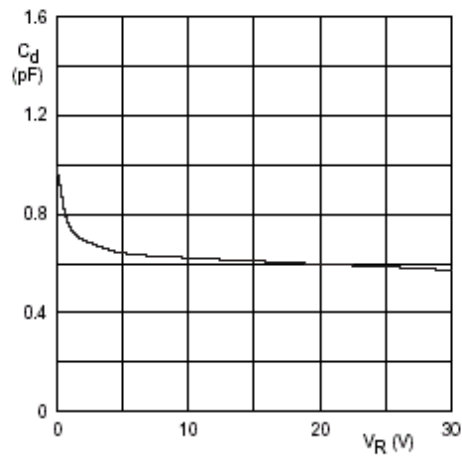
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	35	V
Continuous Forward Current	I_F	100	mA
Power Dissipation	P_{tot}	500	mW
Operating Junction Temperature Range	T_J	- 65 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

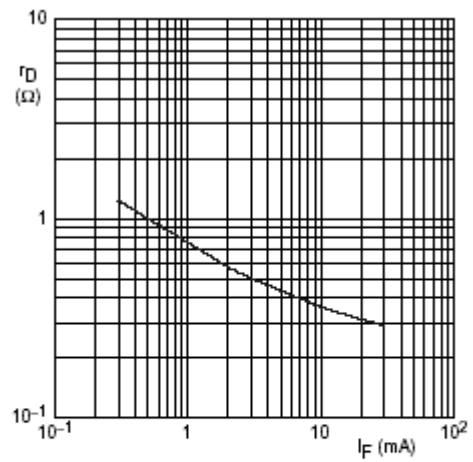
Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Reverse Current at $V_R = 20\text{ V}$	I_R	-	20	nA
Diode Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$ at $V_R = 3\text{ V}$, $f = 1\text{ MHz}$	C_D	- -	1.05 0.9	pF
Diode Forward Resistance at $I_F = 3\text{ mA}$, $f = 100\text{ MHz}$ at $I_F = 10\text{ mA}$, $f = 100\text{ MHz}$	r_D	- -	0.7 0.5	Ω
Reverse Resistance at $V_R = 1\text{ V}$, $f = 100\text{ MHz}$	$1/g_p$	100	-	K Ω
Series Inductance	L_s	2	-	nH

Typical Characteristics



$f = 1 \text{ MHz}; T_J = 25^\circ\text{C}.$

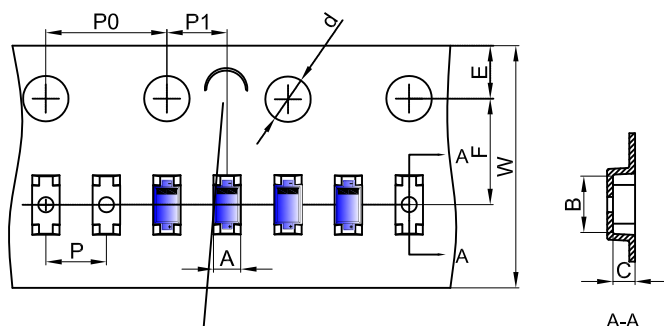
Fig.2 Diode capacitance as a function of reverse voltage; typical values.



$f = 100 \text{ MHz}; T_J = 25^\circ\text{C}.$

Fig.3 Diode forward resistance as a function of forward current; typical values.

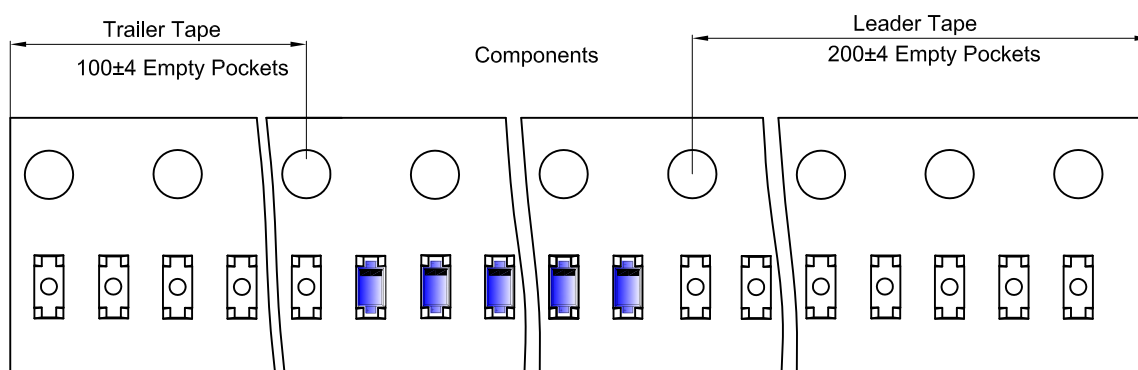
SOD-523 Embossed Carrier Tape



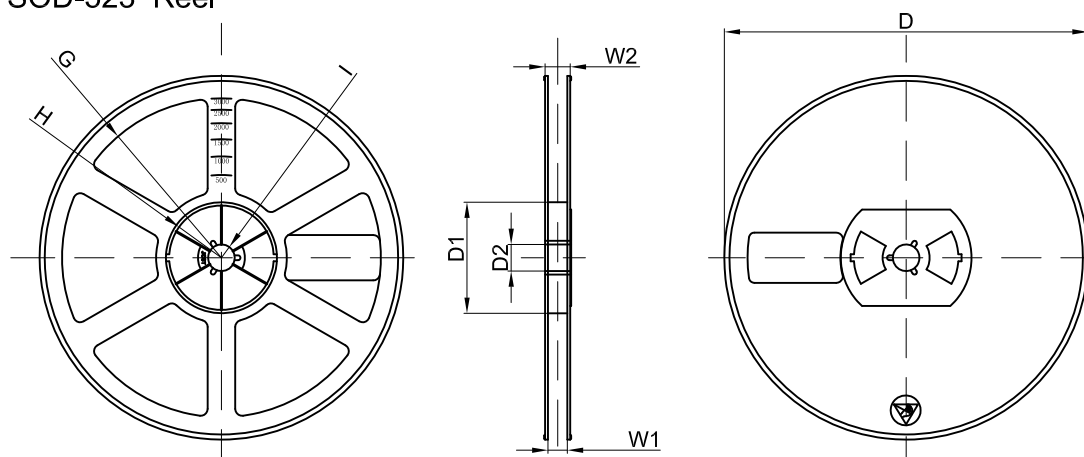
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



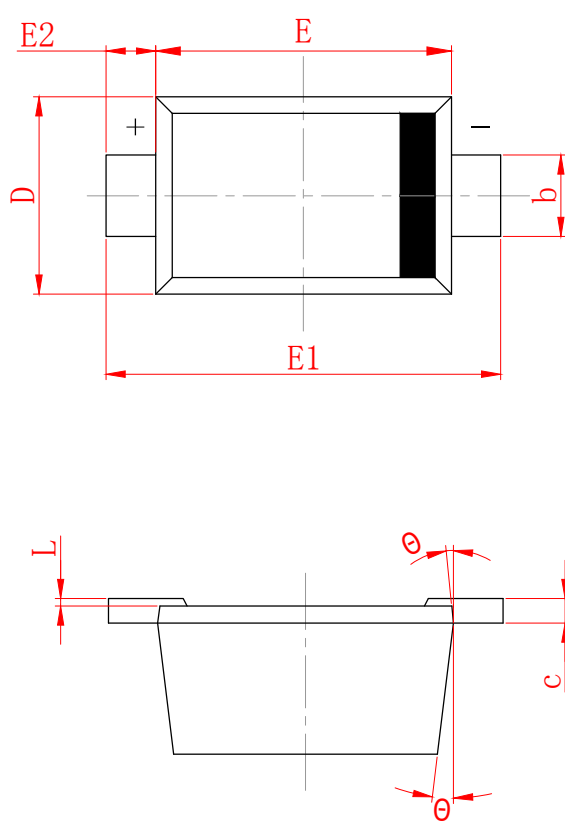
SOD-523 Reel



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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