

BAND SWITCHING DIODE

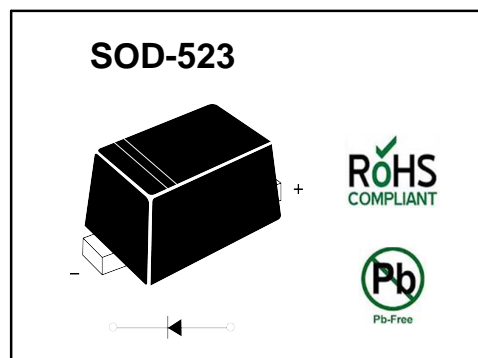
Applications

- Low loss band switching in VHF television tuners
- Surface mount band-switching circuits

Marking Code: "T"

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



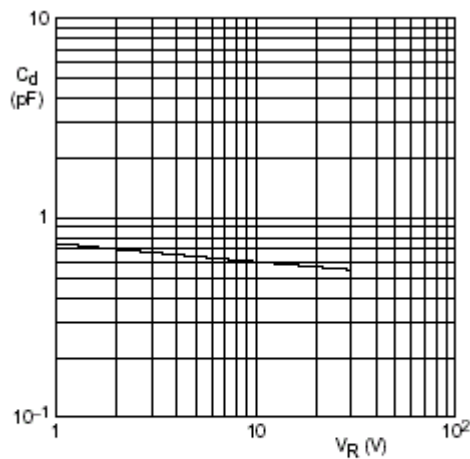
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	35	V
Continuous Forward Current	I_F	100	mA
Power Dissipation ($T_S = 90\text{ }^{\circ}\text{C}$)	P_{tot}	715	mW
Junction Temperature	T_J	- 65 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

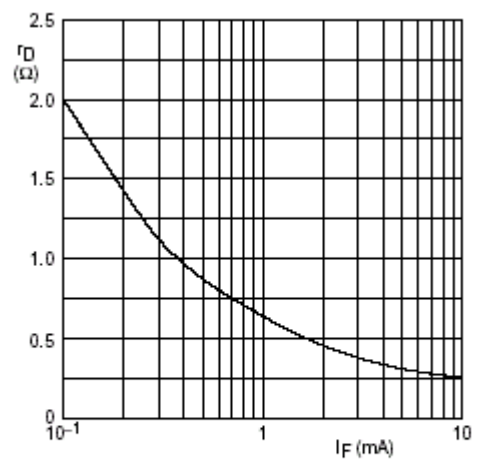
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	1	V
Reverse Current at $V_R = 25\text{ V}$	I_R	50	nA
Diode Forward Resistance at $I_F = 2\text{ mA}$, $f = 100\text{ MHz}$	r_D	0.7	Ω
Capacitance at $f = 1\text{ MHz}$, $V_R = 6\text{ V}$	C_d	1.2	pF

Typical Characteristics



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

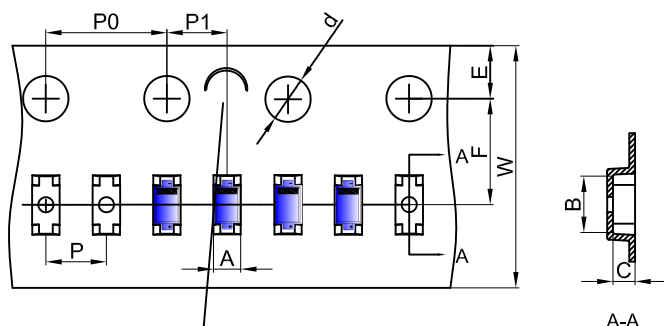
Fig. 1 Diode capacitance as a function of reverse voltage; typical values.



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

Fig. 2 Diode forward resistance as a function of forward current; typical values.

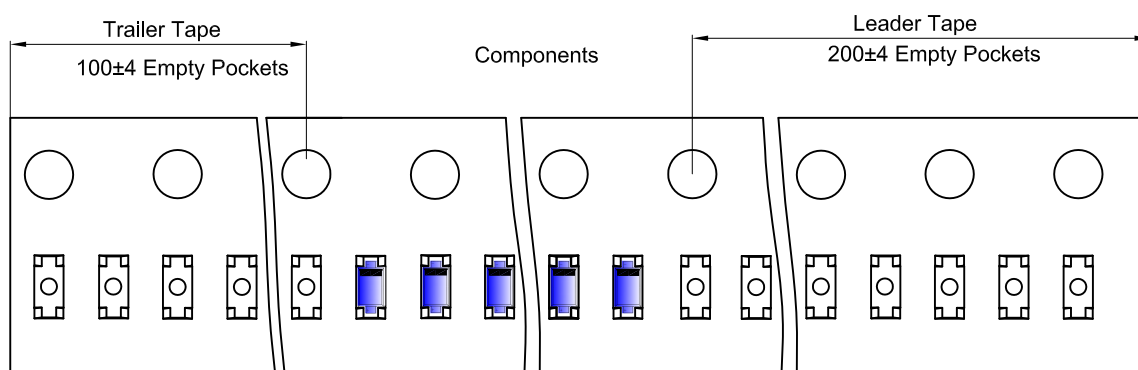
SOD-523 Embossed Carrier Tape



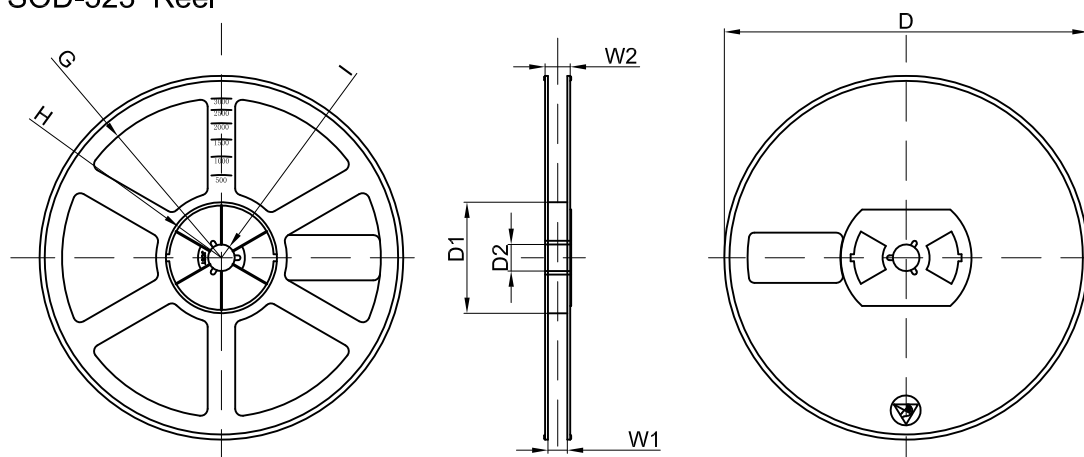
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



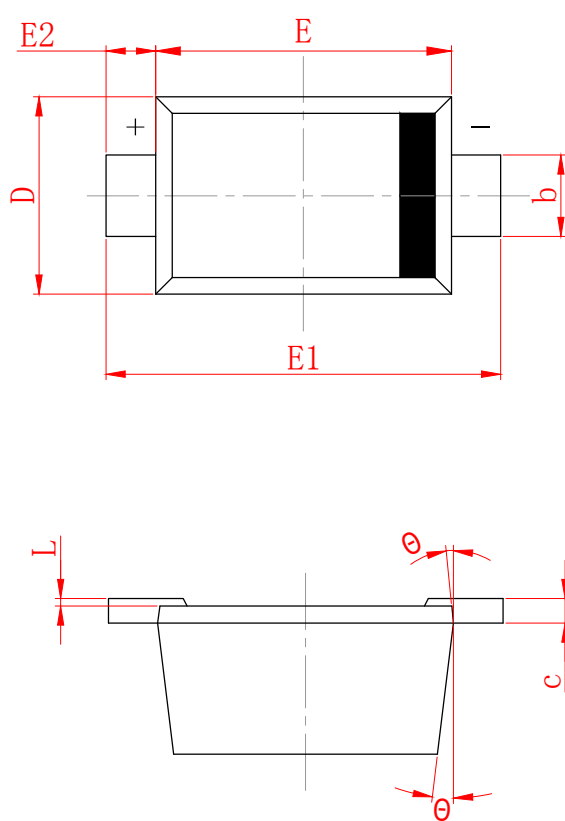
SOD-523 Reel



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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