

Plastic-Encapsulate Diode

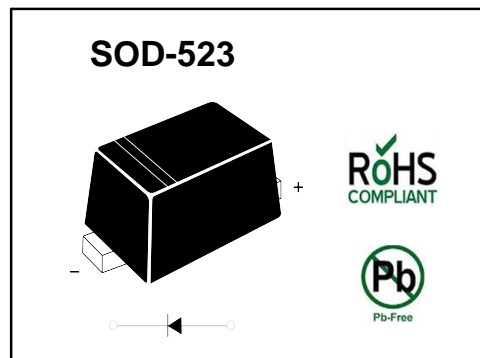
ZENER DIODE

FEATURES

- Planar Die Construction
- 100mW Power Dissipation
- Zener Voltages from 2.4 – 75V

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	150	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

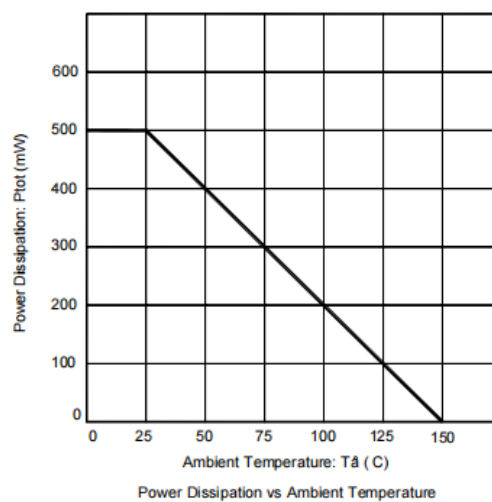
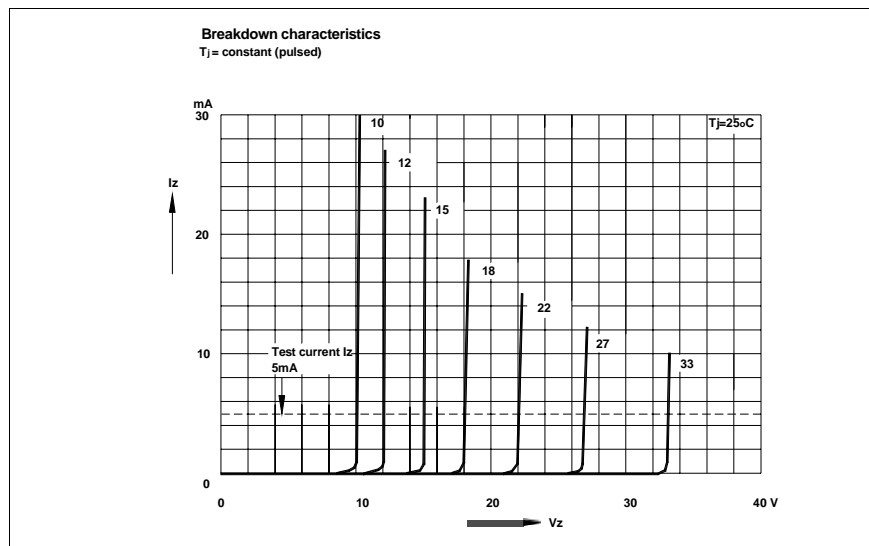
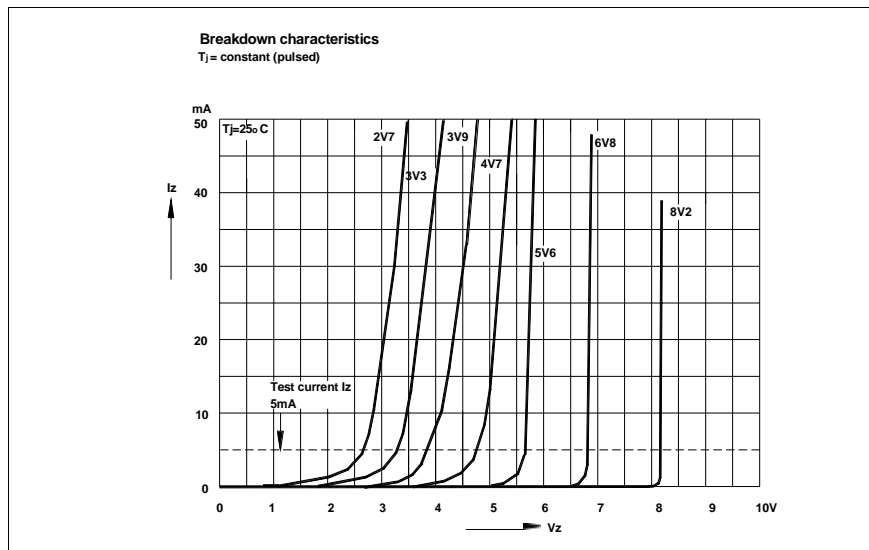
Electrical Characteristics (25 °C unless otherwise specified)

Type Number	Type Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current	
		V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R	V _R
		Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(mA)		(uA)	(V)
BZX584C2V4	Z11	2.4	2.20	2.60	5	100	600	1.0	50	1.0
BZX584C2V7	Z12	2.7	2.5	2.9	5	100	600	1.0	20	1.0
BZX584C3V0	Z13	3.0	2.8	3.2	5	95	600	1.0	10	1.0
BZX584C3V3	Z14	3.3	3.1	3.5	5	95	600	1.0	5	1.0
BZX584C3V6	Z15	3.6	3.4	3.8	5	90	600	1.0	5	1.0
BZX584C3V9	Z16	3.9	3.7	4.1	5	90	600	1.0	3	1.0
BZX584C4V3	Z17	4.3	4.0	4.6	5	90	600	1.0	3	1.0
BZX584C4V7	Z1	4.7	4.4	5.0	5	80	500	1.0	3	2.0
BZX584C5V1	Z2	5.1	4.8	5.4	5	60	480	1.0	2	2.0
BZX584C5V6	Z3	5.6	5.2	6.0	5	40	400	1.0	1	2.0
BZX584C6V2	Z4	6.2	5.8	6.6	5	10	150	1.0	3	4.0
BZX584C6V8	Z5	6.8	6.4	7.2	5	15	80	1.0	2	4.0
BZX584C7V5	Z6	7.5	7.0	7.9	5	15	80	1.0	1	5.0
BZX584C8V2	Z7	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0
BZX584C9V1	Z8	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0
BZX584C10	Z9	10	9.4	10.6	5	20	150	1.0	0.2	7.0
BZX584C11	Y1	11	10.4	11.6	5	20	150	1.0	0.1	8.0
BZX584C12	Y2	12	11.4	12.7	5	25	150	1.0	0.1	8.0
BZX584C13	Y3	13	12.4	14.1	5	30	170	1.0	0.1	8.0
BZX584C15	Y4	15	13.8	15.6	5	30	200	1.0	0.1	10.5
BZX584C16	Y5	16	15.3	17.1	5	40	200	1.0	0.1	11.2
BZX584C18	Y6	18	16.8	19.1	5	45	225	1.0	0.1	12.6
BZX584C20	Y7	20	18.8	21.2	5	55	225	1.0	0.1	14.0
BZX584C22	Y8	22	20.8	23.3	5	55	250	1.0	0.1	15.4
BZX584C24	Y9	24	22.8	25.6	5	70	250	1.0	0.1	16.8
BZX584C27	Y10	27	25.1	28.9	2	80	300	0.5	0.1	18.9
BZX584C30	Y11	30	28.0	32.0	2	80	300	0.5	0.1	21.0
BZX584C33	Y12	33	31.0	35.0	2	80	325	0.5	0.1	23.1
BZX584C36	Y13	36	34.0	38.0	2	90	350	0.5	0.1	25.2
BZX584C39	Y14	39	37.0	41.0	2	130	350	0.5	0.1	27.3
BZX584C43	Y15	43	40	46	2.5	130	500	1	2	33
BZX584C47	Y16	47	44	50	2.5	150	500	1	2	36
BZX584C51	Y17	51	48	54	2.5	180	500	1	1	39
BZX584C56	Y18	56	52	60	2.5	180	500	1	1	43
BZX584C62	Y19	62	58	66	2.5	200	500	1	0.2	47
BZX584C68	Y20	68	64	72	2.5	250	500	1	0.2	52
BZX584C75	Y21	75	70	79	2.5	300	500	1	0.2	57

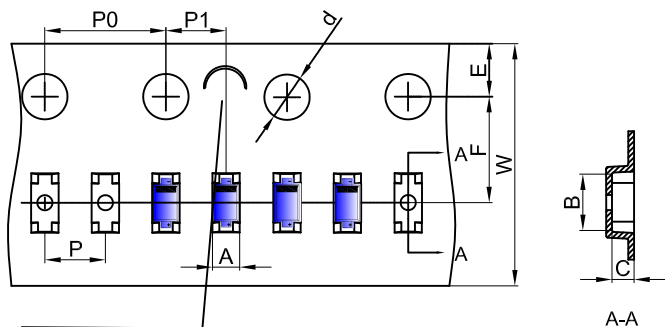
Notes: 1. Valid provided that device terminals are kept at ambient temperature.

2. Tested with pulses, period=5ms, pulse width =300us.

3. f = 1KHz



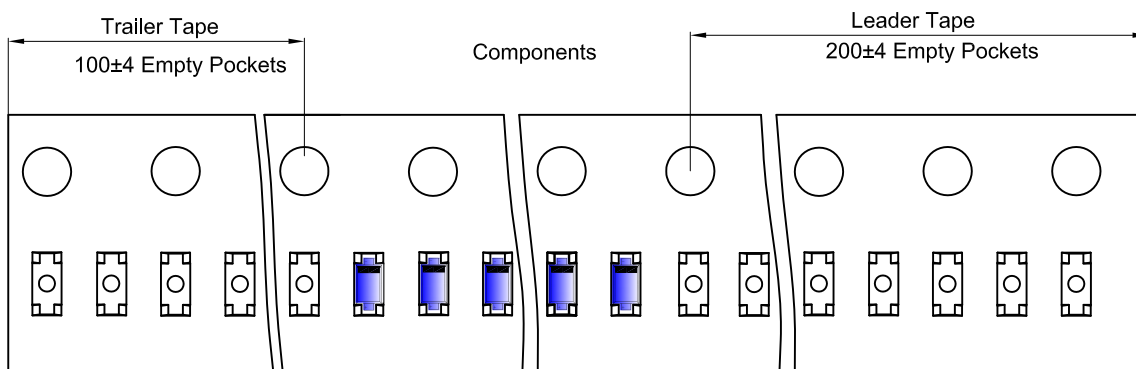
SOD-523 Embossed Carrier Tape



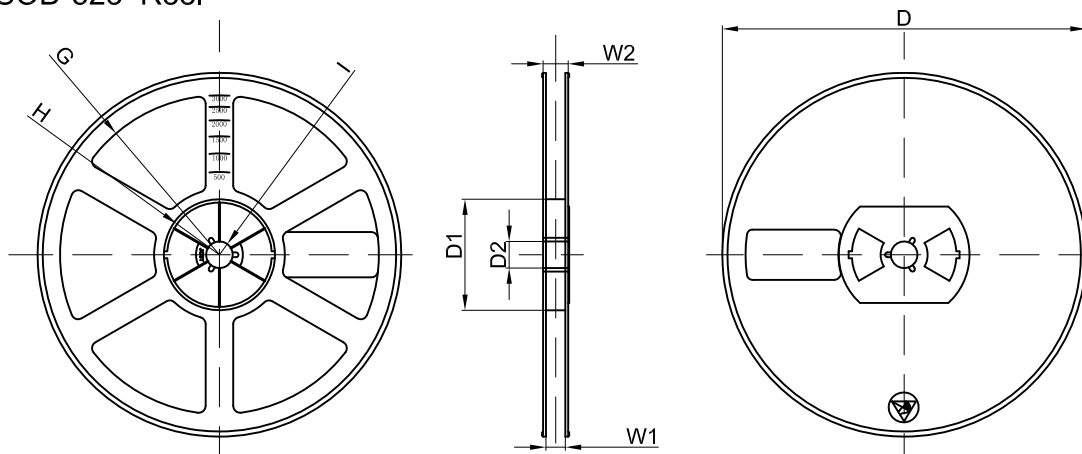
NOTE: TO GAVE 'C' ON CARRIER TAPE PER 120MM

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



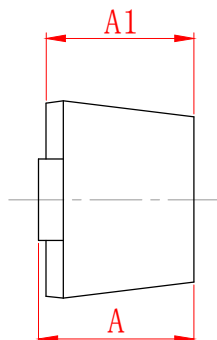
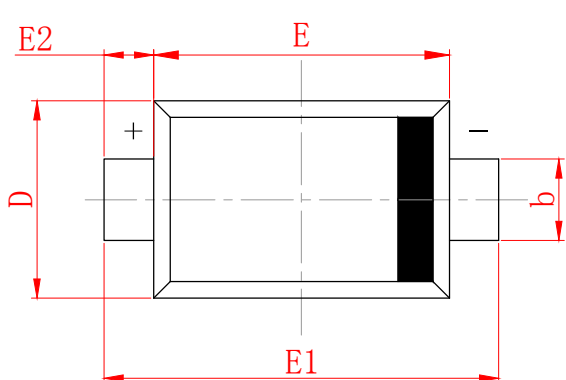
SOD-523 Reel



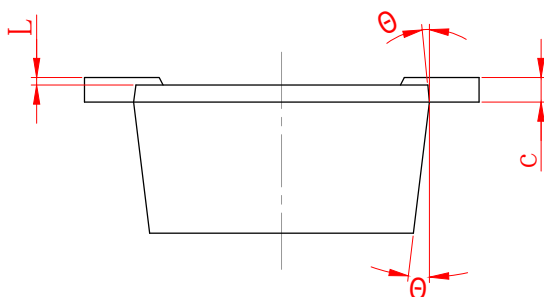
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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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