

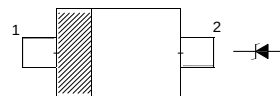
Silicon Planar Zener Diodes

Features

- Total power dissipation : max. 300 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

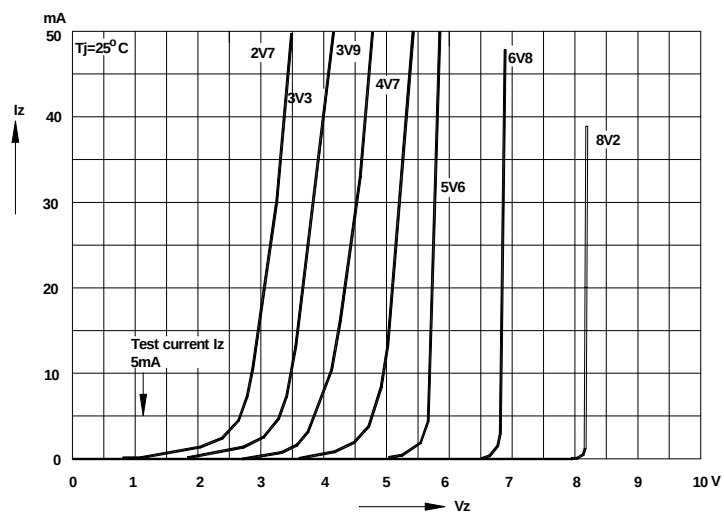
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

Characteristics at T_a = 25 °C

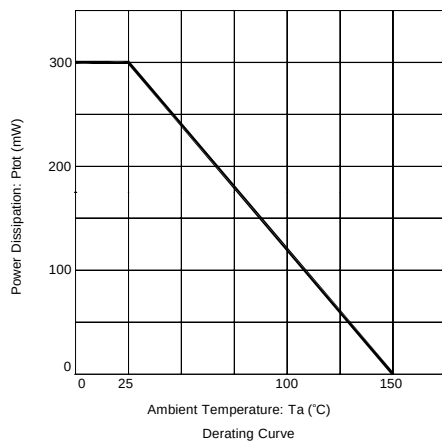
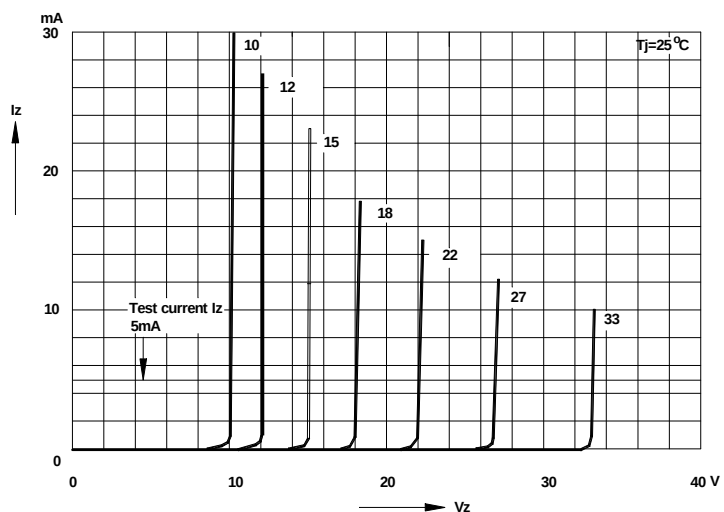
Type	Marking Code	Zener Voltage Range ¹⁾			Dynamic Impedance		Reverse Leakage Current	
		V _{znom}	I _{ZT}	for V _{ZT}	Z _{ZT} (Max.)	at I _{ZT}	I _R (Max.)	at V _R
		V	mA	V	Ω	mA	μA	V
MM3Z2V0	B0	2.0	5	1.8...2.15	100	5	120	0.5
MM3Z2V2	C0	2.2	5	2.08...2.33	100	5	120	0.7
MM3Z2V4	1C	2.4	5	2.28...2.56	100	5	120	1
MM3Z2V7	1D	2.7	5	2.5...2.9	110	5	120	1
MM3Z3V0	1E	3.0	5	2.8...3.2	120	5	50	1
MM3Z3V3	1F	3.3	5	3.1...3.5	130	5	20	1
MM3Z3V6	1H	3.6	5	3.4...3.8	130	5	10	1
MM3Z3V9	1J	3.9	5	3.7...4.1	130	5	5	1
MM3Z4V3	1K	4.3	5	4...4.6	130	5	5	1
MM3Z4V7	1M	4.7	5	4.4...5	130	5	2	1
MM3Z5V1	1N	5.1	5	4.8...5.4	130	5	2	1.5
MM3Z5V6	1P	5.6	5	5.2...6	80	5	1	2.5
MM3Z6V2	1R	6.2	5	5.8...6.6	50	5	1	3
MM3Z6V8	1X	6.8	5	6.4...7.2	30	5	0.5	3.5
MM3Z7V5	1Y	7.5	5	7...7.9	30	5	0.5	4
MM3Z8V2	1Z	8.2	5	7.7...8.7	30	5	0.5	5
MM3Z9V1	2A	9.1	5	8.5...9.6	30	5	0.5	6
MM3Z10	2B	10	5	9.4...10.6	30	5	0.1	7
MM3Z11	2C	11	5	10.4...11.6	30	5	0.1	8
MM3Z12	2D	12	5	11.4...12.7	35	5	0.1	9
MM3Z13	2E	13	5	12.4...14.1	35	5	0.1	10
MM3Z15	2F	15	5	13.8...15.6	40	5	0.1	11
MM3Z16	2H	16	5	15.3...17.1	40	5	0.1	12
MM3Z18	2J	18	5	16.8...19.1	45	5	0.1	13
MM3Z20	2K	20	5	18.8...21.2	50	5	0.1	15
MM3Z22	2M	22	5	20.8...23.3	55	5	0.1	17
MM3Z24	2N	24	5	22.8...25.6	60	5	0.1	19
MM3Z27	2P	27	5	25.1...28.9	70	2	0.1	21
MM3Z30	2R	30	5	28...32	80	2	0.1	23
MM3Z33	2X	33	5	31...35	80	2	0.1	25
MM3Z36	2Y	36	5	34...38	90	2	0.1	27
MM3Z39	2Z	39	2.5	37...41	100	2	2	30
MM3Z43	3A	43	2.5	40...46	130	2	2	33
MM3Z47	3B	47	2.5	44...50	150	2	2	36
MM3Z51	3C	51	2.5	48...54	180	2	1	39
MM3Z56	3D	56	2.5	52...60	180	2	1	43
MM3Z62	3E	62	2.5	58...66	200	2	0.2	47
MM3Z68	3F	68	2.5	64...72	250	2	0.2	52
MM3Z75	3H	75	2.5	70...79	300	2	0.2	57

¹⁾ V_Z is tested with pulses (20 ms).

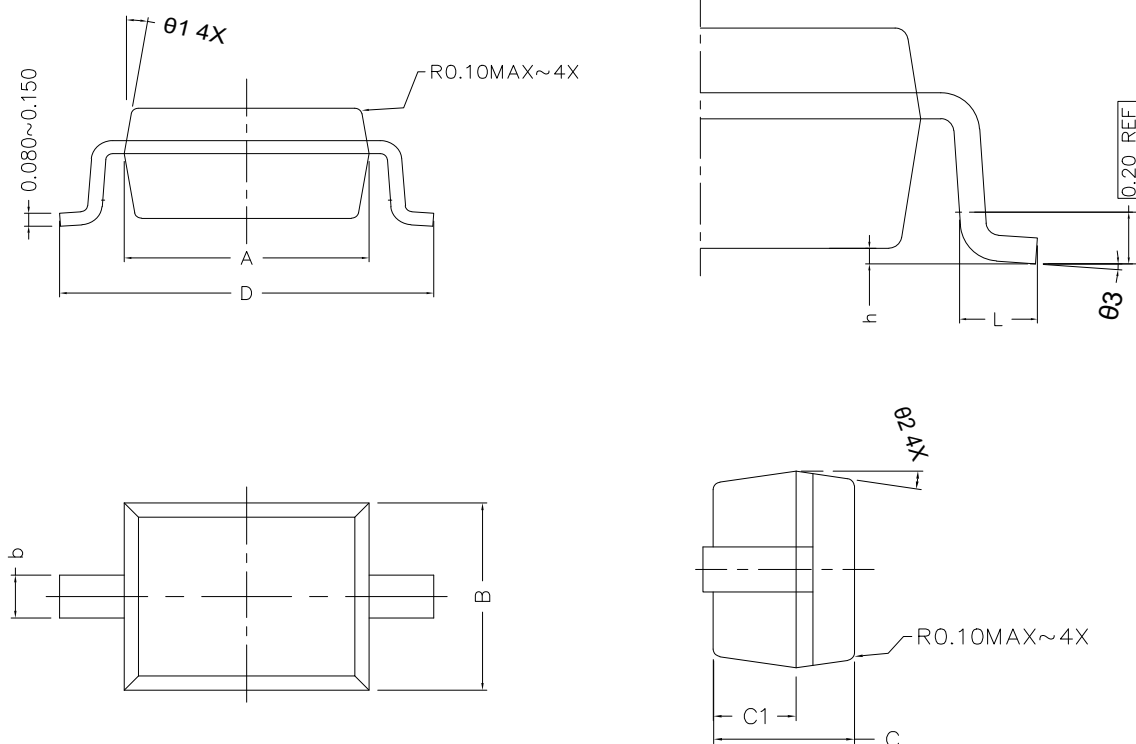
Breakdown characteristics
 $T_J = \text{constant (pulsed)}$



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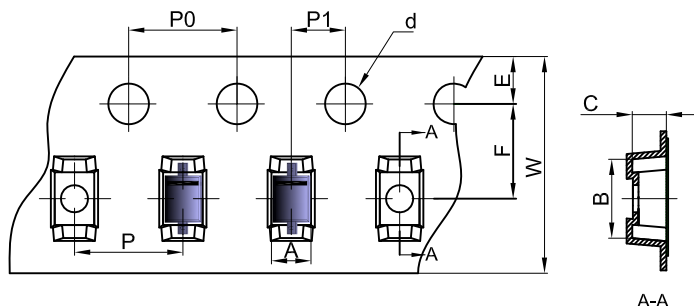


SOD-323 Package Outline Dimensions (Units: mm)



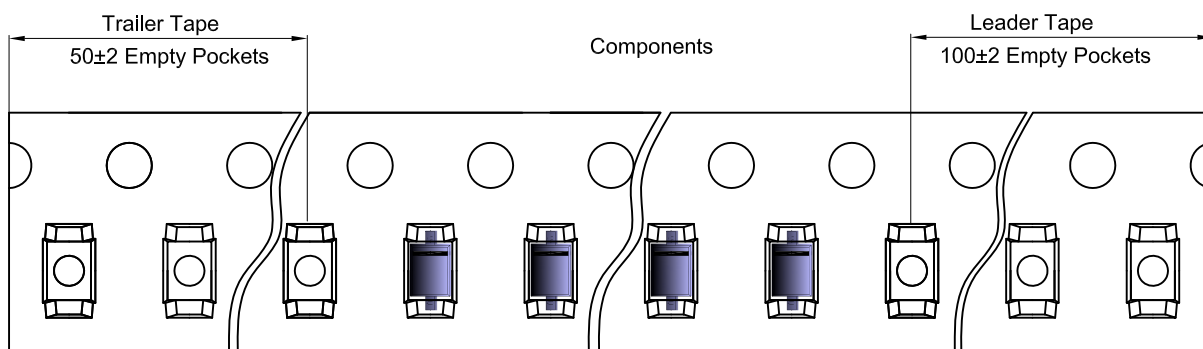
COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	1.600	1.700	1.800
B	1.200	1.300	1.400
C	0.750	0.850	0.950
C1	0.450	0.500	0.550
D	2.450	2.600	2.750
L	0.200	0.300	0.400
b	0.200	0.300	0.400
h	0.010	0.050	0.100
θ1	9° TYPE		
θ2	9° TYPE		
θ3	0° ~ 8°		

SOD-323 Embossed Carrier Tape

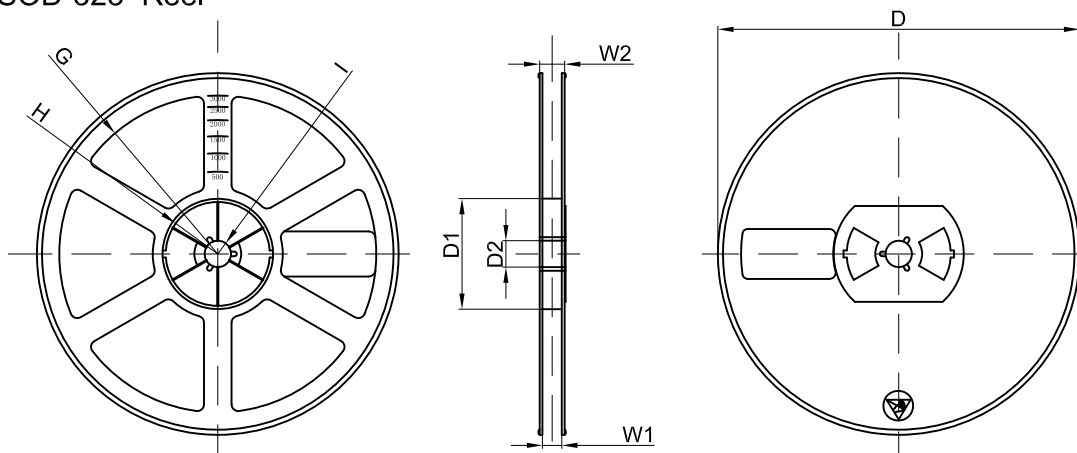


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



SOD-323 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	192x182x182	180,000 pcs	400x385x205	

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