



Silicon Planar Zener Diodes

**FEATURES**

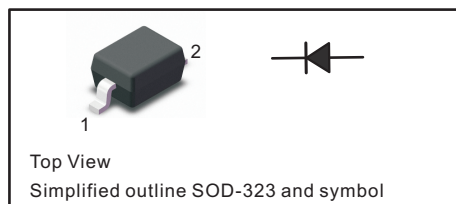
- Total power dissipation: Max. 300mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately  $\pm 2\%$

**MECHANICAL DATA**

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

**PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode

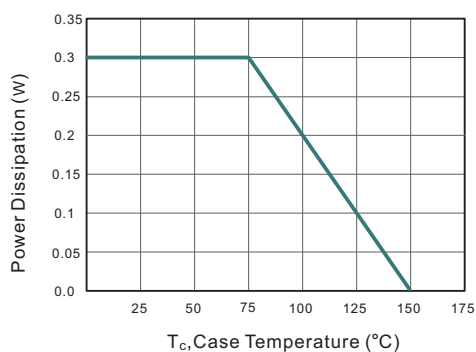


**Absolute Maximum Ratings And Characteristics ( Ta = 25 °C )**

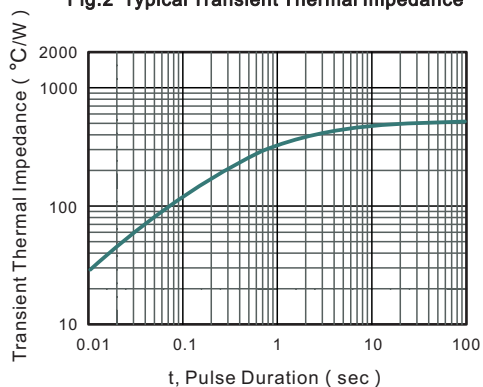
Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	300	mW
Forward Voltage at $I_F = 10 \text{ mA}$	$V_F$	0.9	V
Typical thermal resistance junction to ambient <sup>(1)</sup>	$R_{\theta JA}$	417	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^{\circ}\text{C}$

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.

**Fig.1 Maximum Continuous Power Derating**



**Fig.2 Typical Transient Thermal Impedance**





Characteristics at Ta = 25°C

Type	Marking	Zener Voltage Range <sup>(1)</sup>			I <sub>ZT</sub>	Dynamic Impedance Z <sub>ZT</sub> ( at I <sub>ZT</sub> )	Reverse Current	
		V <sub>ZT</sub> ( at I <sub>ZT</sub> )					I <sub>R</sub>	at V <sub>R</sub>
		Min ( V )	Nom ( V )	Max ( V )	(mA)	Max ( Ω )	Max ( μA )	( V )
MM3Z2V0B	B0	1.96	2.0	2.04	5	100	120	0.5
MM3Z2V2B	C0	2.16	2.2	2.24	5	100	120	0.7
MM3Z2V4B	1C	2.35	2.4	2.45	5	100	120	1
MM3Z2V7B	1D	2.65	2.7	2.75	5	110	120	1
MM3Z3V0B	1E	2.94	3.0	3.06	5	120	50	1
MM3Z3V3B	1F	3.23	3.3	3.37	5	130	20	1
MM3Z3V6B	1H	3.53	3.6	3.67	5	130	10	1
MM3Z3V9B	1J	3.82	3.9	3.98	5	130	5	1
MM3Z4V3B	1K	4.21	4.3	4.39	5	130	5	1
MM3Z4V7B	1M	4.61	4.7	4.79	5	130	2	1
MM3Z5V1B	1N	5	5.1	5.2	5	130	2	1.5
MM3Z5V6B	1P	5.49	5.6	5.71	5	80	1	2.5
MM3Z6V2B	1R	6.08	6.2	6.32	5	50	1	3
MM3Z6V8B	1X	6.66	6.8	6.94	5	30	0.5	3.5
MM3Z7V5B	1Y	7.35	7.5	7.65	5	30	0.5	4
MM3Z8V2B	1Z	8.04	8.2	8.36	5	30	0.5	5
MM3Z9V1B	2A	8.92	9.1	9.28	5	30	0.5	6
MM3Z10B	2B	9.8	10	10.2	5	30	0.1	7
MM3Z11B	2C	10.78	11	11.22	5	30	0.1	8
MM3Z12B	2D	11.76	12	12.24	5	35	0.1	9
MM3Z13B	2E	12.74	13	13.26	5	35	0.1	10
MM3Z15B	2F	14.7	15	15.3	5	40	0.1	11
MM3Z16B	2H	15.68	16	16.32	5	40	0.1	12
MM3Z18B	2J	17.64	18	18.36	5	45	0.1	13
MM3Z20B	2K	19.6	20	20.4	5	50	0.1	15
MM3Z22B	2M	21.56	22	22.44	5	55	0.1	17
MM3Z24B	2N	23.52	24	24.48	5	60	0.1	19
MM3Z27B	2P	26.46	27	27.54	2	70	0.1	21
MM3Z30B	2R	29.4	30	30.60	2	80	0.1	23
MM3Z33B	2X	32.34	33	33.66	2	80	0.1	25
MM3Z36B	2Y	35.28	36	36.72	2	90	0.1	27
MM3Z39B	2Z	38.22	39	39.78	2	100	0.1	30
MM3Z43B	3A	42.14	43	43.86	2	130	0.1	33
MM3Z47B	3B	46.06	47	47.94	2	150	0.1	36
MM3Z51B	3C	49.98	51	52.02	2	180	0.1	39
MM3Z56B	3D	54.88	56	57.12	2	200	0.1	43
MM3Z62B	3E	60.76	62	63.24	2	215	0.1	47
MM3Z68B	3F	66.64	68	69.36	2	240	0.1	52
MM3Z75B	3H	73.5	75	76.5	2	265	0.1	56

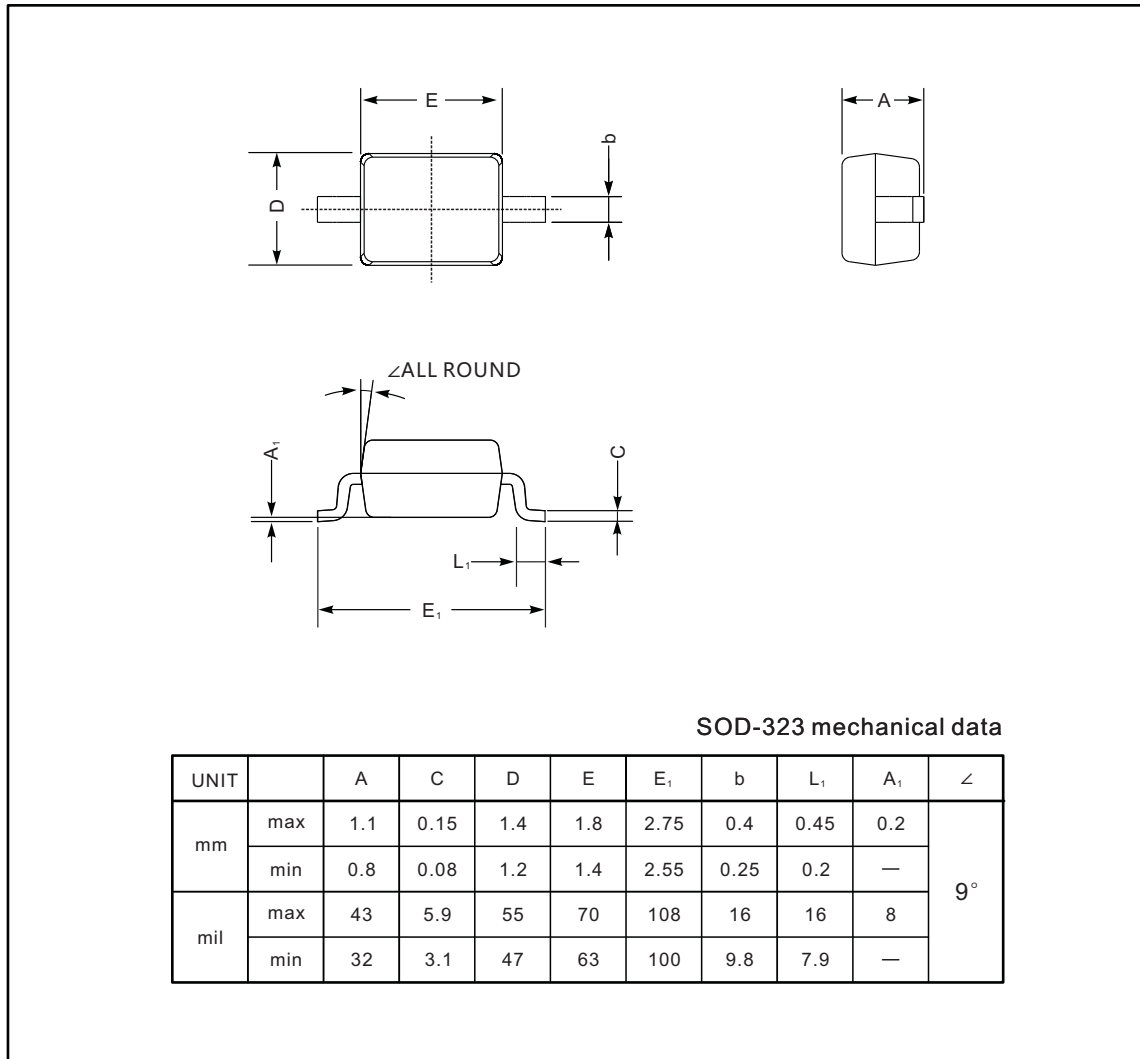
( 1 ) V<sub>ZT</sub> is tested with pulses (20 ms)



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-323



**The recommended mounting pad size**

