

MM3Z2B0AT THRU MM3ZB75AT

SILICON PLANAR ZENER DIODES

Power Dissipation: 300mW

Zener Voltage: 2.0V to 75V

FEATURES

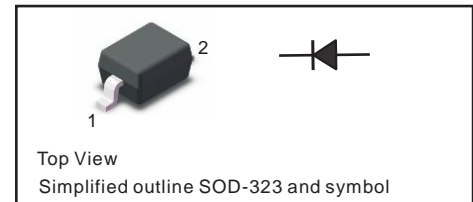
- ◆ Total power dissipation: Max. 300mW.
- ◆ Wide zener reverse voltage range 2.0V to 75V.
- ◆ Small plastic package suitable for surface mounted design.
- ◆ Tolerance approximately $\pm 2\%$

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

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 juncting to ambient ⁽¹⁾	$R_{\theta JA}$	417	$^\circ\text{C/W}$
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

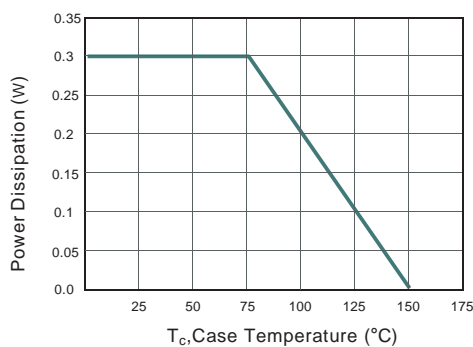
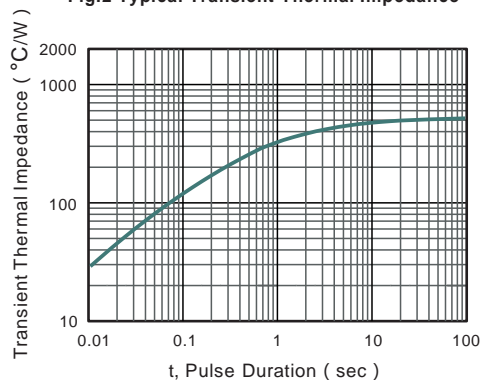


Fig.2 Typical Transient Thermal Impedance



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Characteristics at Ta = 25°C

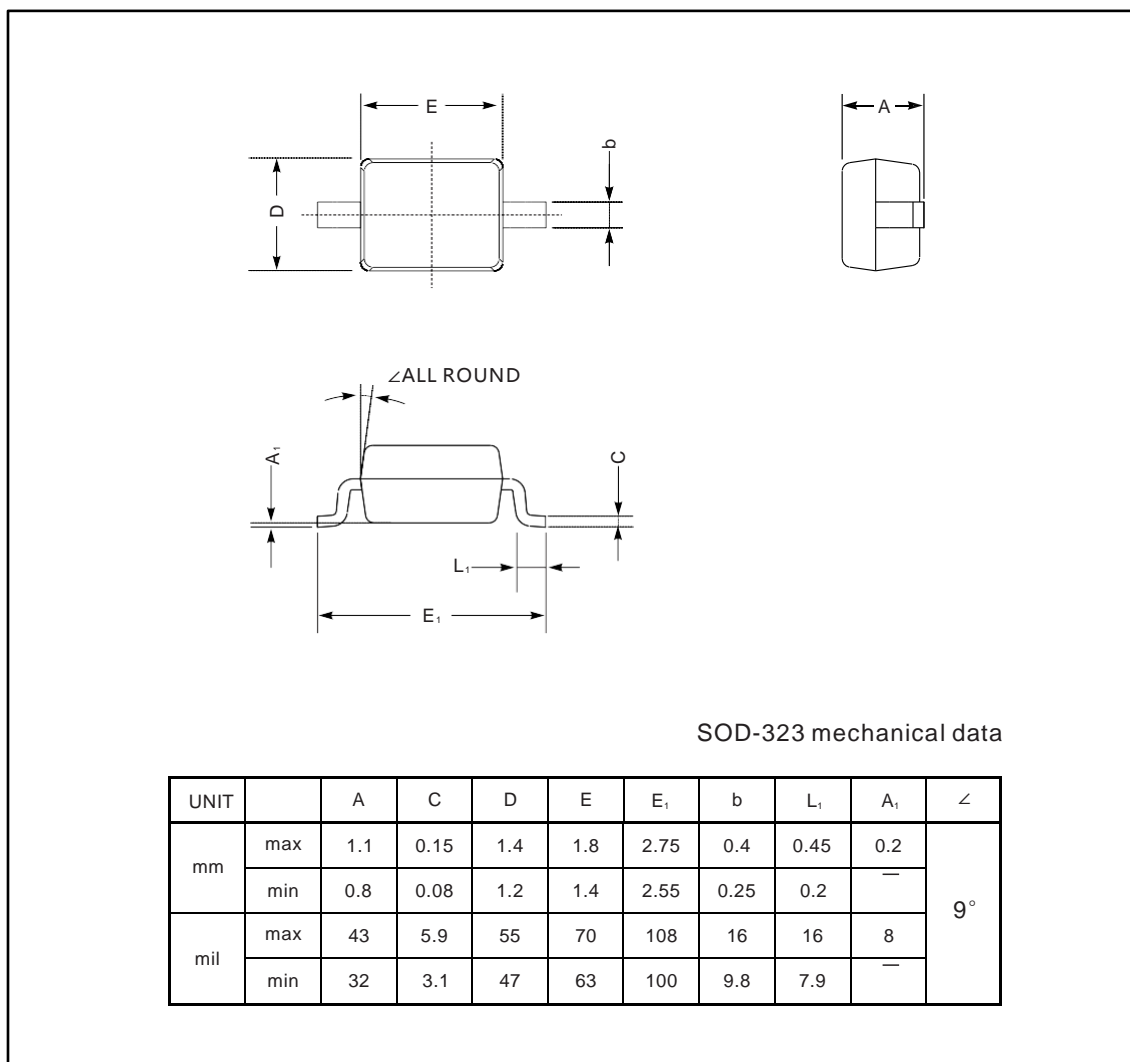
Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT}	Dynamic Impedance	Reverse Current	
		V _{ZT} (at I _{ZT})				Z _T (at I _{ZT})	I _R	at V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
MM3Z2B0AT	0B	1.96	2.0	2.04	5	100	120	0.5
MM3Z2B2AT	0C	2.16	2.2	2.24	5	100	120	0.7
MM3Z2B4AT	C1	2.35	2.4	2.45	5	100	120	1
MM3Z2B7AT	D1	2.65	2.7	2.75	5	110	120	1
MM3Z3B0AT	E1	2.94	3.0	3.06	5	120	50	1
MM3Z3B3AT	F1	3.23	3.3	3.37	5	130	20	1
MM3Z3B6AT	H1	3.53	3.6	3.67	5	130	10	1
MM3Z3B9AT	J1	3.82	3.9	3.98	5	130	5	1
MM3Z4B3AT	K1	4.21	4.3	4.39	5	130	5	1
MM3Z4B7AT	M1	4.61	4.7	4.79	5	130	2	1
MM3Z5B1AT	N1	5	5.1	5.2	5	130	2	1.5
MM3Z5B6AT	P1	5.49	5.6	5.71	5	80	1	2.5
MM3Z6B2AT	R1	6.08	6.2	6.32	5	50	1	3
MM3Z6B8AT	X1	6.66	6.8	6.94	5	30	0.5	3.5
MM3Z7B5AT	Y1	7.35	7.5	7.65	5	30	0.5	4
MM3Z8B2AT	Z1	8.04	8.2	8.36	5	30	0.5	5
MM3Z9B1AT	A2	8.92	9.1	9.28	5	30	0.5	6
MM3ZB10AT	B2	9.8	10	10.2	5	30	0.1	7
MM3ZB11AT	C2	10.78	11	11.22	5	30	0.1	8
MM3ZB12AT	D2	11.76	12	12.24	5	35	0.1	9
MM3ZB13AT	E2	12.74	13	13.26	5	35	0.1	10
MM3ZB15AT	F2	14.7	15	15.3	5	40	0.1	11
MM3ZB16AT	H2	15.68	16	16.32	5	40	0.1	12
MM3ZB18AT	J2	17.64	18	18.36	5	45	0.1	13
MM3ZB20AT	K2	19.6	20	20.4	5	50	0.1	15
MM3ZB22AT	M2	21.56	22	22.44	5	55	0.1	17
MM3ZB24AT	N2	23.52	24	24.48	5	60	0.1	19
MM3ZB27AT	P2	26.46	27	27.54	2	70	0.1	21
MM3ZB30AT	R2	29.4	30	30.60	2	80	0.1	23
MM3ZB33AT	X2	32.34	33	33.66	2	80	0.1	25
MM3ZB36AT	Y2	35.28	36	36.72	2	90	0.1	27
MM3ZB39AT	Z2	38.22	39	39.78	2	100	0.1	30
MM3ZB43AT	A3	42.14	43	43.86	2	130	0.1	33
MM3ZB47AT	B3	46.06	47	47.94	2	150	0.1	36
MM3ZB51AT	C3	49.98	51	52.02	2	180	0.1	39
MM3ZB56AT	D3	54.88	56	57.12	2	200	0.1	43
MM3ZB62AT	E3	60.76	62	63.24	2	215	0.1	47
MM3ZB68AT	F3	66.64	68	69.36	2	240	0.1	52
MM3ZB75AT	H3	73.5	75	76.5	2	265	0.1	56

(1) V_{ZT} is tested with pulses (20 ms)

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Package Outline

SOD-323



The recommended mounting pad size

