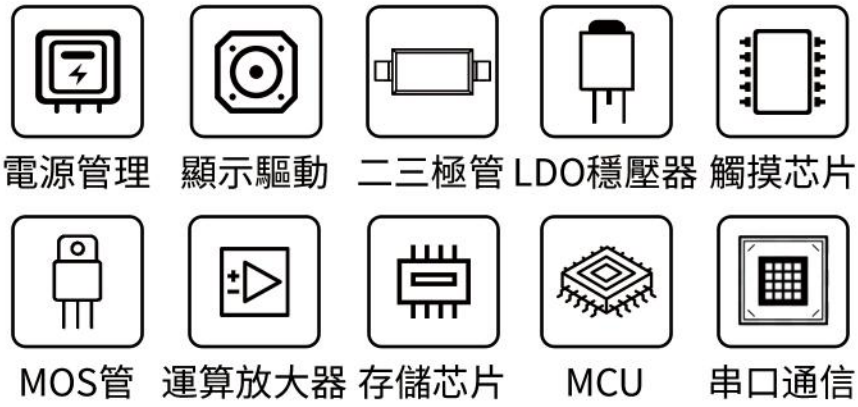
TDSEMIC
拓電半導體

自主封測 品質把控 售後保障

WEB | WWW.TDSEMIC.COM



MM3Z2V4-TD

產品規格說明書

MM3Z2V0-TD THRU MM3Z75-TD

Silicon Planar Zener Diodes

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

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±2%

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

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

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

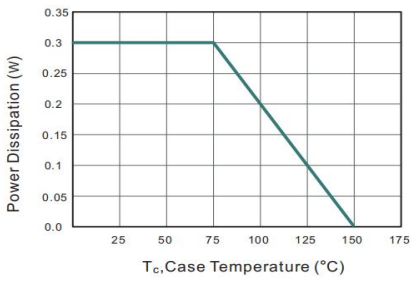
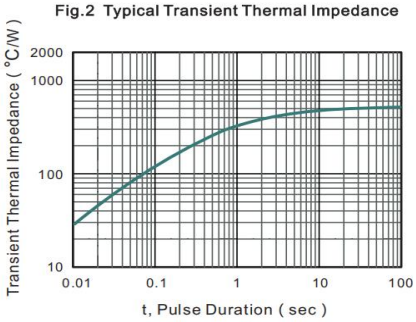


Fig.2 Typical Transient Thermal Impedance



MM3Z2V0-TD THRU MM3Z75-TD

Characteristics at Ta = 25°C

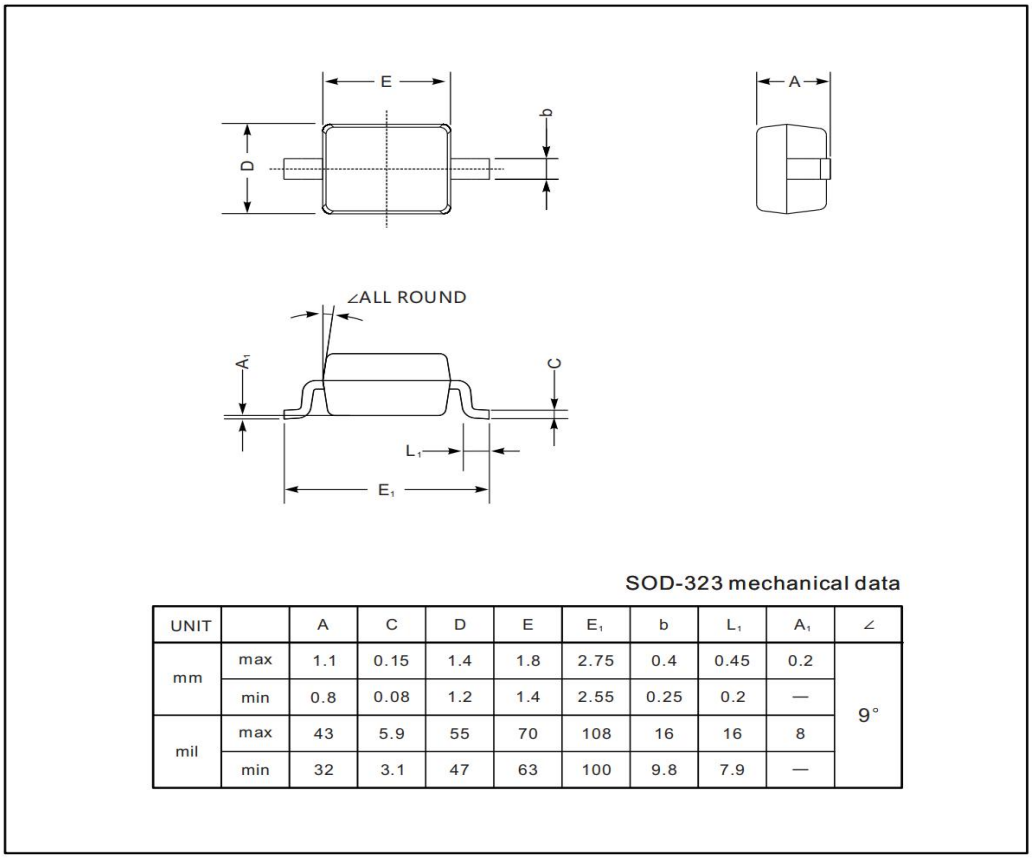
Type	Marking	Zener Voltage Range (1)			I_{ZT}	Dynamic Impedance	Reverse Current	
		V_{ZT} (at I_{ZT})				Z_{ZT} (at I_{ZT})	I_R	at V_R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
MM3Z2V0-TD	0B	1.96	2.0	2.04	5	100	120	0.5
MM3Z2V2-TD	0C	2.16	2.2	2.24	5	100	120	0.7
MM3Z2V4-TD	C1	2.35	2.4	2.45	5	100	120	1
MM3Z2V7-TD	D1	2.65	2.7	2.75	5	110	120	1
MM3Z3V0-TD	E1	2.94	3.0	3.06	5	120	50	1
MM3Z3V3-TD	F1	3.23	3.3	3.37	5	130	20	1
MM3Z3V6-TD	H1	3.53	3.6	3.67	5	130	10	1
MM3Z3V9-TD	J1	3.82	3.9	3.98	5	130	5	1
MM3Z4V3-TD	K1	4.21	4.3	4.39	5	130	5	1
MM3Z4V7-TD	M1	4.61	4.7	4.79	5	130	2	1
MM3Z5V1-TD	N1	5	5.1	5.2	5	130	2	1.5
MM3Z5V6-TD	P1	5.49	5.6	5.71	5	80	1	2.5
MM3Z6V2-TD	R1	6.08	6.2	6.32	5	50	1	3
MM3Z6V8-TD	X1	6.66	6.8	6.94	5	30	0.5	3.5
MM3Z7V5-TD	Y1	7.35	7.5	7.65	5	30	0.5	4
MM3Z8V2-TD	Z1	8.04	8.2	8.36	5	30	0.5	5
MM3Z9V1-TD	A2	8.92	9.1	9.28	5	30	0.5	6
MM3Z10-TD	B2	9.8	10	10.2	5	30	0.1	7
MM3Z11-TD	C2	10.78	11	11.22	5	30	0.1	8
MM3Z12-TD	D2	11.76	12	12.24	5	35	0.1	9
MM3Z13-TD	E2	12.74	13	13.26	5	35	0.1	10
MM3Z15-TD	F2	14.7	15	15.3	5	40	0.1	11
MM3Z16-TD	H2	15.68	16	16.32	5	40	0.1	12
MM3Z18-TD	J2	17.64	18	18.36	5	45	0.1	13
MM3Z20-TD	K2	19.6	20	20.4	5	50	0.1	15
MM3Z22-TD	M2	21.56	22	22.44	5	55	0.1	17
MM3Z24-TD	N2	23.52	24	24.48	5	60	0.1	19
MM3Z27-TD	P2	26.46	27	27.54	2	70	0.1	21
MM3Z30-TD	R2	29.4	30	30.60	2	80	0.1	23
MM3Z33-TD	X2	32.34	33	33.66	2	80	0.1	25
MM3Z36-TD	Y2	35.28	36	36.72	2	90	0.1	27
MM3Z39-TD	Z2	38.22	39	39.78	2	100	0.1	30
MM3Z43-TD	A3	42.14	43	43.86	2	130	0.1	33
MM3Z47-TD	B3	46.06	47	47.94	2	150	0.1	36
MM3Z51-TD	C3	49.98	51	52.02	2	180	0.1	39
MM3Z56-TD	D3	54.88	56	57.12	2	200	0.1	43
MM3Z62-TD	E3	60.76	62	63.24	2	215	0.1	47
MM3Z68-TD	F3	66.64	68	69.36	2	240	0.1	52
MM3Z75-TD	H3	73.5	75	76.5	2	265	0.1	56

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

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E_1	b	L_1	A_1	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size

