



Silicon Planar Zener Diodes

FEATURES

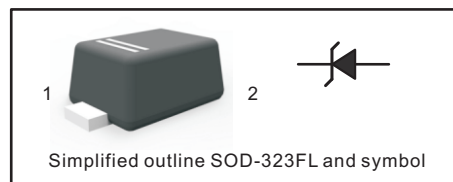
- Total power dissipation: Max. 300mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately $\pm 2\%$

MECHANICAL DATA

- Case: SOD-323FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 4.5mg / 0.00016oz

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 $I_F = 10$ mA	V_F	0.9	V
Typical thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	417	$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}C$

(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

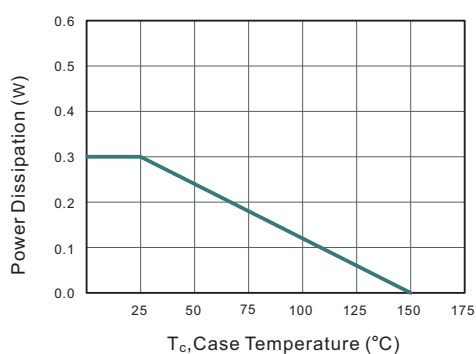
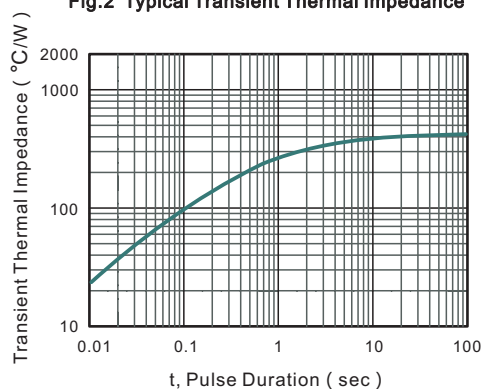


Fig.2 Typical Transient Thermal Impedance





Characteristics at Ta = 25°C

Type	Marking	Zener Voltage Range ⁽¹⁾				Dynamic Impedance		Reverse Current	
		V _{ZT} (at I _{ZT})			I _{ZT}	Z _{ZT} (at I _{ZT})	I _{ZT}	I _R	at V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	(mA)	Max (μA)	(V)
MM3Z2V0LB	0B	1.96	2.0	2.04	5	100	5	120	0.5
MM3Z2V2LB	0C	2.16	2.2	2.24	5	100	5	120	0.7
MM3Z2V4LB	C1	2.35	2.4	2.45	5	100	5	120	1
MM3Z2V7LB	D1	2.65	2.7	2.75	5	110	5	120	1
MM3Z3V0LB	E1	2.94	3.0	3.06	5	120	5	50	1
MM3Z3V3LB	F1	3.23	3.3	3.37	5	130	5	20	1
MM3Z3V6LB	H1	3.53	3.6	3.67	5	130	5	10	1
MM3Z3V9LB	J1	3.82	3.9	3.98	5	130	5	5	1
MM3Z4V3LB	K1	4.21	4.3	4.39	5	130	5	5	1
MM3Z4V7LB	M1	4.61	4.7	4.79	5	130	5	2	1
MM3Z5V1LB	N1	5	5.1	5.2	5	130	5	2	1.5
MM3Z5V6LB	P1	5.49	5.6	5.71	5	80	5	1	2.5
MM3Z6V2LB	R1	6.08	6.2	6.32	5	50	5	1	3
MM3Z6V8LB	X1	6.66	6.8	6.94	5	30	5	0.5	3.5
MM3Z7V5LB	Y1	7.35	7.5	7.65	5	30	5	0.5	4
MM3Z8V2LB	Z1	8.04	8.2	8.36	5	30	5	0.5	5
MM3Z9V1LB	A2	8.92	9.1	9.28	5	30	5	0.5	6
MM3Z10LB	B2	9.8	10	10.2	5	30	5	0.1	7
MM3Z11LB	C2	10.78	11	11.22	5	30	5	0.1	8
MM3Z12LB	D2	11.76	12	12.24	5	35	5	0.1	9
MM3Z13LB	E2	12.74	13	13.26	5	35	5	0.1	10
MM3Z15LB	F2	14.7	15	15.3	5	40	5	0.1	11
MM3Z16LB	H2	15.68	16	16.32	5	40	5	0.1	12
MM3Z18LB	J2	17.64	18	18.36	5	45	5	0.1	13
MM3Z20LB	K2	19.6	20	20.4	5	50	5	0.1	15
MM3Z22LB	M2	21.56	22	22.44	5	55	5	0.1	17
MM3Z24LB	N2	23.52	24	24.48	5	60	5	0.1	19
MM3Z27LB	P2	26.46	27	27.54	5	70	2	0.1	21
MM3Z30LB	R2	29.4	30	30.60	5	80	2	0.1	23
MM3Z33LB	X2	32.34	33	33.66	5	80	2	0.1	25
MM3Z36LB	Y2	35.28	36	36.72	5	90	2	0.1	27
MM3Z39LB	Z2	38.22	39	39.78	2.5	100	2	2	30
MM3Z43LB	A3	42.14	43	43.86	2.5	130	2	2	33
MM3Z47LB	B3	46.06	47	47.94	2.5	150	2	2	36
MM3Z51LB	C3	49.98	51	52.02	2.5	180	2	1	39
MM3Z56LB	D3	54.88	56	57.12	2.5	180	2	1	43
MM3Z62LB	E3	60.76	62	63.24	2.5	200	2	0.2	47
MM3Z68LB	F3	66.64	68	69.36	2.5	250	2	0.2	52
MM3Z75LB	H3	73.5	75	76.5	2.5	300	2	0.2	57

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

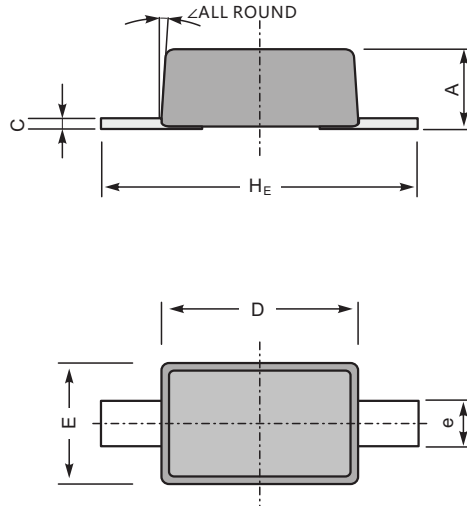
(2) Z_{ZT} is measured at I_Z by given a very small A.C. current signal.



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323FL



UNIT		A	C	D	E	e	H_E	\angle
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

The recommended mounting pad size

