

MM1W3V3~MM1W200

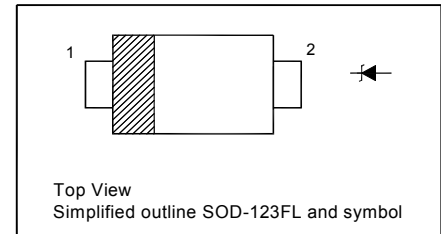
Silicon Planar Zener Diodes

Features

- Total power dissipation: Max.1 W
- Small plastic package suitable for surface mounted design

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



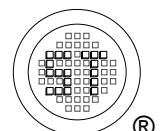
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	1	W
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	125	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

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

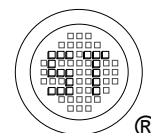
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	V



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

Type	Marking Code	Zener Voltage Range			Dynamic Impedance		Reverse Current	
		V_{ZT}		at I_{ZT}	Z_{ZT}	at I_{ZT}	I_R	at V_R
		Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (μA)	(V)
MM1W3V3	9D1	3.1	3.5	100	8	100	150	1
MM1W3V6	7P1	3.4	3.8	100	8	100	100	1
MM1W3V9	7Q1	3.7	4.1	100	8	100	50	1
MM1W4V3	7R1	4	4.6	100	7	100	25	1
MM1W4V7	7S1	4.4	5	100	7	100	10	1
MM1W5V1	7T1	4.8	5.4	100	6	100	5	1
MM1W5V6	7U1	5.2	6	100	4	100	10	2
MM1W6V2	7V1	5.8	6.6	100	3	100	5	2
MM1W6V8	7W1	6.4	7.2	100	3	100	10	3
MM1W7V5	7X1	7	7.9	100	2	100	50	3
MM1W8V2	7Y1	7.7	8.7	100	2	100	10	3
MM1W9V1	7Z1	8.5	9.6	50	4	50	10	5
MM1W10	8A1	9.4	10.6	50	4	50	7	7.5
MM1W11	8B1	10.4	11.6	50	7	50	4	8.2
MM1W12	8C1	11.4	12.7	50	7	50	3	9.1
MM1W13	8D1	12.4	14.1	50	10	50	2	10
MM1W15	8E1	13.8	15.6	50	10	50	1	11
MM1W16	8F1	15.3	17.1	25	15	25	1	12
MM1W18	8G1	16.8	19.1	25	15	25	1	13
MM1W20	8H1	18.8	21.2	25	15	25	1	15
MM1W22	8J1	20.8	23.3	25	15	25	1	16
MM1W24	8K1	22.8	25.6	25	15	25	1	18
MM1W27	8L1	25.1	28.9	25	15	25	1	20
MM1W30	8M1	28	32	25	15	25	1	22
MM1W33	8N1	31	35	25	15	25	1	24
MM1W36	8P1	34	38	10	40	10	1	27
MM1W39	8Q1	37	41	10	40	10	1	30
MM1W43	8R1	40	46	10	45	10	1	33
MM1W47	8S1	44	50	10	45	10	1	36
MM1W51	8T1	48	54	10	60	10	1	39
MM1W56	8U1	52	60	10	60	10	1	43
MM1W62	8V1	58	66	10	80	10	1	47
MM1W68	8W1	64	72	10	80	10	1	51
MM1W75	8X1	70	79	10	100	10	1	56
MM1W82	8Y1	77	87	10	100	10	1	62
MM1W91	8Z1	85	96	5	200	5	1	68
MM1W100	9A1	94	106	5	200	5	1	75
MM1W110	9B1	104	116	5	250	5	1	82
MM1W120	9C1	114	127	5	250	5	1	91
MM1W160	9F1	153	171	5	350	5	1	120
MM1W200	9E1	190	210	1	2200	1	1	170



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Electrical Characteristics Curves

Fig 1. Forward Current Vs. Forward Voltage Curve

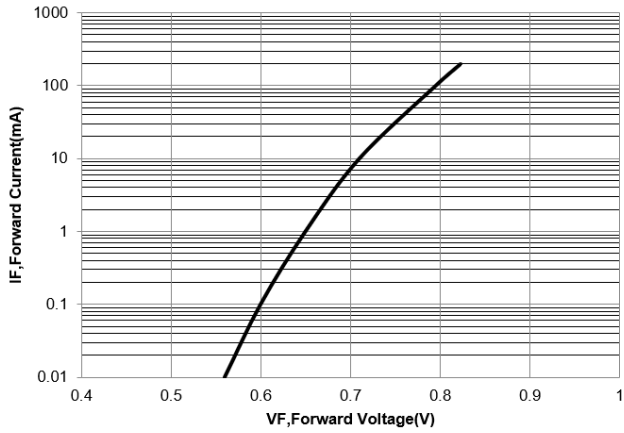


Fig 2. Zener Current Vs. Zener Voltage Curve

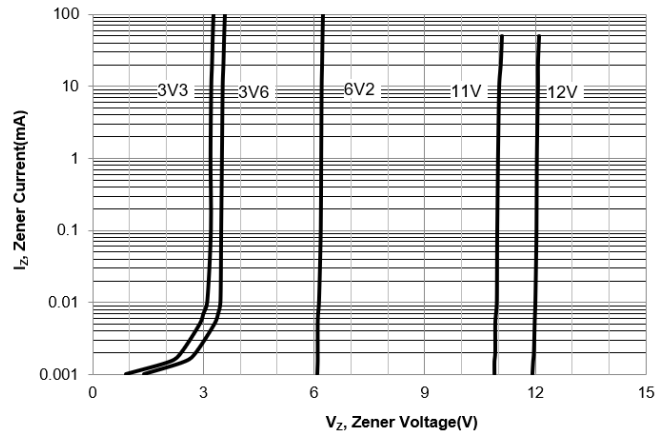
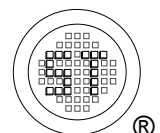
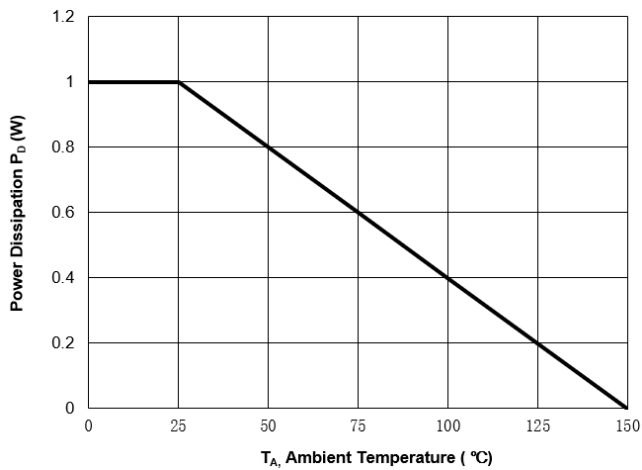


Fig 3. Power Derating Curve

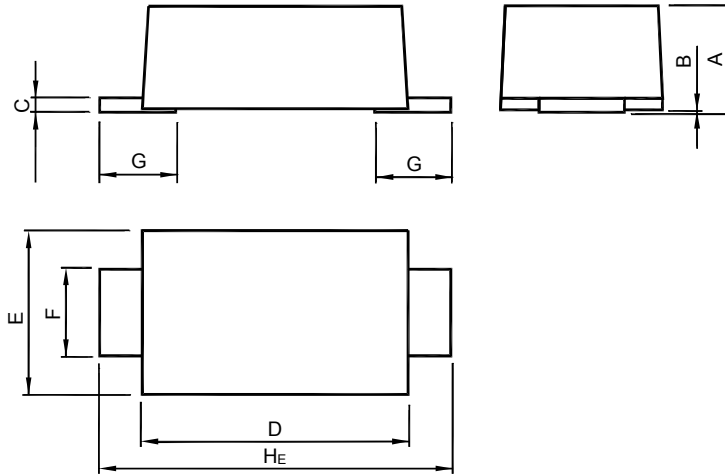


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PACKAGE OUTLINE

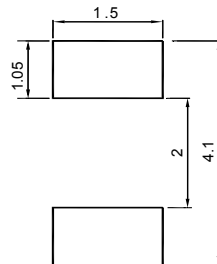
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08 0.88	0.1 0	0.2 0.1	2.9 2.7	1.9 1.7	1.1 0.8	0.85 0.45	3.9 3.5

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line

" *** " = Part No.

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