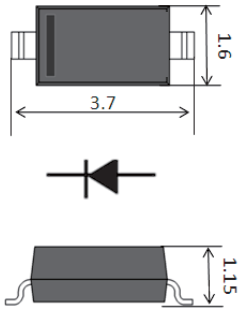
0.5W SILICON PLANAR ZENER DIODES

FEATURES

- Total power dissipation: max. 500 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately ±2%
- PPAP capable
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

AEC-Q101 Qualified

SOD-123



MECHANICAL DATA

- Case: SOD-123 plastic case

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (T_A=25℃)

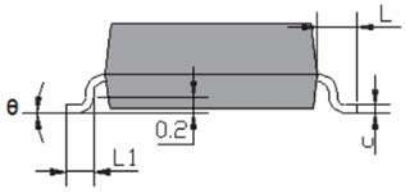
	Symbols	*Value*	*Units*
Zener current see table "Characteristics"			
Power dissipation	P_{tot}	500	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to+150	°C

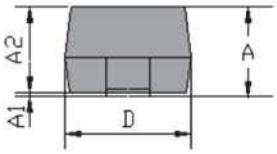
ELECTRICAL CHARACTERISTICS (TA=25°C)

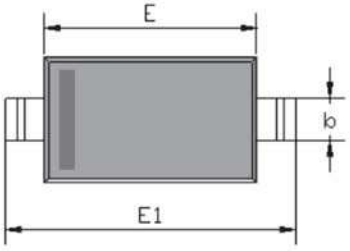
Type	Marking Code	Zener Voltage[1]			Zener Impedance				Leakage Current	
		V_{ZT}(V)			Z_{ZT}	I_{ZT}	Z_{ZK}	I_{ZK}	I_R(μA)	V_R
		Min.	Typ.	Max.	(Ω)	(mA)	(Ω)	(mA)	Max.	(V)
MM1Z2V4B-V	2WX	2.35	2.4	2.45	100	5	600	1	50	1.0
MM1Z2V7B-V	2W1	2.65	2.7	2.75	100	5	600	1	20	1.0
MM1Z3V0B-V	2W2	2.94	3.0	3.06	95	5	600	1	10	1.0
MM1Z3V3B-V	2W3	3.23	3.3	3.37	95	5	600	1	5	1.0
MM1Z3V6B-V	2W4	3.53	3.6	3.67	90	5	600	1	5	1.0
MM1Z3V9B-V	2W5	3.82	3.9	3.98	90	5	600	1	3	1.0
MM1Z4V3B-V	2W6	4.21	4.3	4.39	90	5	600	1	3	1.0
MM1Z4V7B-V	2W7	4.61	4.7	4.79	80	5	500	1	3	2.0
MM1Z5V1B-V	2W8	5.00	5.1	5.20	60	5	480	1	2	2.0
MM1Z5V6B-V	2W9	5.49	5.6	5.71	40	5	400	1	1	2.0
MM1Z6V2B-V	2WA	6.08	6.2	6.32	10	5	150	1	3	4.0
MM1Z6V8B-V	2WB	6.66	6.8	6.94	15	5	80	1	2	4.0
MM1Z7V5B-V	2WC	7.35	7.5	7.65	15	5	50	1	1	5.0
MM1Z8V2B-V	2WD	7.79	8.04	8.36	15	5	50	1	0.7	5.0
MM1Z9V1B-V	2WE	8.92	9.1	9.28	15	5	100	1	0.5	6.0
MM1Z10B-V	2WF	9.80	10.0	10.20	20	5	150	1	0.2	7.0
MM1Z11B-V	2WG	10.78	11.0	11.22	20	5	150	1	0.1	8.0
MM1Z12B-V	2WH	11.76	12.0	12.24	25	5	150	1	0.1	8.0
MM1Z13B-V	2WI	12.74	13.0	13.26	30	5	170	1	0.1	8.0
MM1Z15B-V	2WJ	14.70	15.0	15.30	30	5	200	1	0.1	10.5
MM1Z16B-V	2WK	15.68	16.0	16.32	40	5	200	1	0.1	11.2
MM1Z18B-V	2WL	17.64	18.0	18.36	45	5	225	1	0.1	12.6
MM1Z20B-V	2WM	19.60	20.0	20.40	55	5	225	1	0.1	14.0
MM1Z22B-V	2WN	21.56	22.0	22.44	55	5	250	1	0.1	15.4
MM1Z24B-V	2WO	23.52	24.0	24.48	70	5	250	1	0.1	16.8
MM1Z27B-V	2WP	26.46	27.0	27.54	80	2	300	0.5	0.1	18.9
MM1Z30B-V	2WQ	29.40	30.0	30.60	80	2	300	0.5	0.1	21.0
MM1Z33B-V	2WR	32.34	33.0	33.66	80	2	325	0.5	0.1	23.1
MM1Z36B-V	2WS	35.28	36.0	36.72	90	2	350	0.5	0.1	25.2
MM1Z39B-V	2WT	38.22	39.0	39.78	130	2.0	350	0.5	0.1	27.3
MM1Z43B-V	2WU	41.16	43.0	42.84	130	2.0	350	0.5	0.1	29.4
MM1Z47B-V	2WV	45.83	47.0	48.17	170	2.0	1000	0.25	0.1	36
MM1Z51B-V	2X1	49.73	51.0	52.27	180	2.0	1300	0.25	0.1	39
MM1Z56B-V	2X2	54.60	56.0	57.40	200	2.0	1400	0.25	0.1	43
MM1Z62B-V	2X3	60.45	62.0	63.55	225	2.0	1400	0.25	0.1	47
MM1Z68B-V	2X4	66.30	68.0	69.70	240	2.0	1600	0.25	0.1	52
MM1Z75B-V	2X5	73.13	75.0	76.87	265	2.0	1700	0.25	0.1	56

[1] Tested with pulses tp = 10 ms.

Package outline : SOD-123

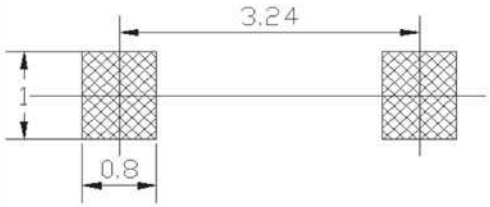






SOD123 Package Outline

Unit	A	A1	A2	b	c	D	E	E1	L	L1	θ
Max.	1.25	0.10	1.15	0.65	0.15	1.70	2.80	3.85	0.500 REF.	0.45	8°
Min.	1.05	0.00	1.05	0.45	0.08	1.50	2.60	3.55		0.25	0°



Land Pattern Recommendation

Note:
1. Halogen free,EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: A42
5. Other Tolerance: ±0.05
6. Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
7. Unit: mm