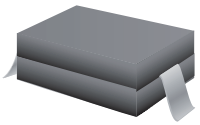
0.5W SILICON PLANAR ZENER DIODES

FEATURES

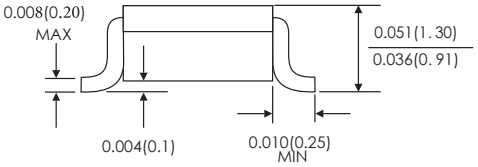
- Total power dissipation: max. 500 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately ±5%
- High temperature soldering guaranteed: 260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

SOD-123



MECHANICAL DATA

- Case: SOD-123 plastic case



Dimensions in inches and (millimeters)

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

	Symbols	*Value*	*Units*
Zener current see table "Characteristics"			
Power dissipation	P_{tot}	500 [1]	mW
Junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-55 to+150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃)

	Symbols	*Min*	*Typ*	*Max*	*Units*
Thermal resistance junction to ambient	$R_{\theta JA}$			340	K/W
Forward voltage at I=10mA	V_F			0.9 [2]	V
Thermal resistance junction to lead	$R_{\theta JL}$			150 [3]	K/W

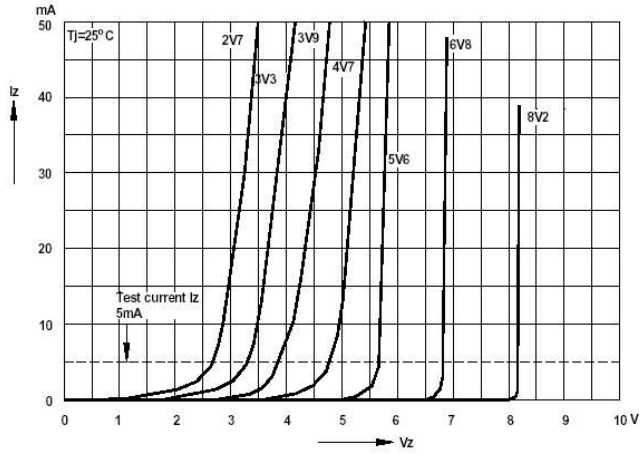
1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²
2) Short duration test pulse used to minimize self-heating effect
3) f=1KHz

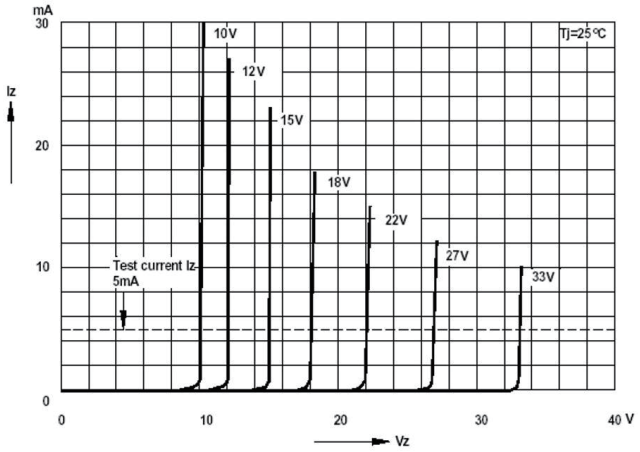
ELECTRICAL CHARACTERISTICS (TA=25°C)

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficent @ IZTC=mV/℃		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V	Min	Max	mA
MM1Z 2V0	**WYY**	2.0	1.8	2.2	5	100	600	1.0	100	0.5	-3.5	0	5
MM1Z 2V4	**WX**	2.4	2.2	2.6	5	100	600	1.0	50	1.0	-3.5	0	5
MM1Z 2V7	**W1**	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0	5
MM1Z 3V0	**W2**	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0	5
MM1Z 3V3	**W3**	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0	5
MM1Z 3V6	**W4**	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0	5
MM1Z 3V9	**W5**	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0	5
MM1Z 4V3	**W6**	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0	5
MM1Z 4V7	**W7**	4.7	4.4	5.0	5	80	500	1.0	3	2.0	-3.5	0.2	5
MM1Z 5V1	**W8**	5.1	4.8	5.4	5	60	480	1.0	2	2.0	-2.7	1.2	5
MM1Z 5V6	**W9**	5.6	5.2	6.0	5	40	400	1.0	1	2.0	-2.0	2.5	5
MM1Z 6V2	**WA**	6.2	5.8	6.6	5	10	150	1.0	3	4.0	0.4	3.7	5
MM1Z 6V8	**WB**	6.8	6.4	7.2	5	15	80	1.0	2	4.0	1.2	4.5	5
MM1Z 7V5	**WC**	7.5	7.0	7.9	5	15	80	1.0	1	5.0	2.5	5.3	5
MM1Z 8V2	**WD**	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5
MM1Z 9V1	**WE**	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5
MM1Z 10	**WF**	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0	5
MM1Z 11	**WG**	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0	5
MM1Z 12	**WH**	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5
MM1Z 13	**WI**	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0	5
MM1Z 15	**WJ**	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0	5
MM1Z 16	**WK**	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0	5
MM1Z 18	**WL**	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0	5
MM1Z 20	**WM**	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0	5
MM1Z 22	**WN**	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0	5
MM1Z 24	**WO**	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0	5
MM1Z 27	**WP**	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
MM1Z 30	**WQ**	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2
MM1Z 33	**WR**	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2
MM1Z 36	**WS**	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2
MM1Z 39	**WT**	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2
MM1Z 43	**WU**	43	40.0	46.0	2	100	700	1.0	0.1	32.0	10.0	12.0	5
MM1Z 47	**WV**	47	44.0	50.0	2	100	750	1.0	0.1	35.0	10.0	12.0	5
MM1Z 51	**WW**	51	48.0	54.0	2	125	700	1.0	0.1	36.0	10.0	12.0	5
MM1Z 56	**XW**	56	52.0	60.0	2	135	700	1.0	0.1	39.0	10.0	12.0	5
MM1Z 62	**6E**	62	58.0	66.0	2	200	1000	1.0	0.2	47.0	10.0	12.0	5
MM1Z 68	**6F**	68	64.0	72.0	2	250	1000	1.0	0.2	52.0	10.0	12.0	5
MM1Z 75	**6H**	75	70.0	79.0	2	300	1000	1.0	0.2	57	10.0	12.0	5

Breakdown characteristics

at Tj=constant (pulsed)





Admissible power dissipation versus ambient temperature

