



1. 主要用途与主要特点

1.1 主要用途

小功率稳压管主要用于移动电话，手持设备和高密度电脑主板等产品的电路电压调整。

1.2 主要特点

- 适合高密度应用的小型化封装尺寸
- 5%的高精度稳压电压稳定性
- 高可靠性芯片和封装工艺

2. 封装管芯示意图



SOD-123

3. 电参数极限值

除非另有规定， $T_{amb} = 25^{\circ}\text{C}$

参 数 名 称	符号	额定值	单位
正向电压 (IF=10mA)	VF	0.85	V
总耗散功率 (注 1)	PD	500	mW
热阻 (注 1)	R _{θJA}	556	°C/W
热阻 (注 2)	R _{θJA}	417	°C/W
最高工作结温	T _j	150	°C
贮存温度	T _{stg}	-55~150	°C

注 1:FR-5=1.0*0.75*0.62 in.

注 2:Alumina=0.4*0.3*0.024 in., 99.5% alumina



4. 电参数特性表

除非另有规定, $T_{amb} = 25^{\circ}\text{C}$

Device	VZ(V) @ IZ=5mA			ZZ@ IZ1=1mA	ZZ @ IZ2 = 5 mA	ZZ @ IZ3 = 20mA	IR@VR	VR	Typical Temperature Coefficient(mV/°C)@ IZ=5mA	
	Min	Nom	Max	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
MMSZ2V4CW	2.28	2.4	2.52	570	95	47.5	40	1	-3.5	0
MMSZ2V7CW	2.57	2.7	2.84	570	95	47.5	16	1	-3.5	0
MMSZ3V0CW	2.85	3	3.15	570	90	47.5	8	1	-3.5	0
MMSZ3V3CW	3.14	3.3	3.47	570	90	38	4	1	-3.5	0
MMSZ3V6CW	3.42	3.6	3.78	570	85	38	4	1	-3.5	0
MMSZ3V9CW	3.72	3.9	4.08	570	85	28.5	2.4	1	-3.5	0
MMSZ4V3CW	4.09	4.3	4.52	570	85	28.5	2.4	1	-3.5	0
MMSZ4V7CW	4.47	4.7	4.94	475	75	14	2.4	2	-3.5	0.2
MMSZ5V1CW	4.85	5.1	5.36	455	57	14	1.6	2	-2.7	1.2
MMSZ5V6CW	5.32	5.6	5.88	380	38	9.5	0.8	2	-2	2.5
MMSZ6V2CW	5.89	6.2	6.51	150	9.5	5.7	2.4	4	0.4	3.7
MMSZ6V8CW	6.46	6.8	7.14	76	14.2	5.7	1.6	4	1.2	4.5
MMSZ7V5CW	7.13	7.5	7.88	76	14.2	5.7	0.8	5	2.5	5.3
MMSZ8V2CW	7.79	8.2	8.61	76	14.2	5.7	0.56	5	3.2	6.2
MMSZ9V1CW	8.65	9.1	9.56	95	14.2	7.6	0.16	7	3.8	7.0
MMSZ10CW	9.50	10	10.50	142.5	19	9.5	0.08	8	4.5	8.0
MMSZ11CW	10.45	11	11.55	142.5	19	9.5	0.08	8	5.4	9.0
MMSZ12CW	11.4	12	12.60	150	23.7	9.5	0.08	8	6.0	10.0
MMSZ13CW	12.35	13	13.65	170	28.5	14.2	0.08	8	7.0	11.0
MMSZ15CW	14.25	15	15.75	190	28.5	19	0.04	11	9.2	13.0
MMSZ16CW	15.2	16	16.80	190	38	19	0.04	11	10.4	14.0
MMSZ18CW	17.10	18	18.90	213	42.7	19	0.04	13	12.4	16.0
MMSZ20CW	19.0	20	21.0	213	52.2	19	0.04	14	14.4	18.0
MMSZ22CW	20.9	22	23.10	237	52.2	23.7	0.04	15	16.4	20.0
MMSZ24CW	22.8	24	25.2	250	66.5	23.7	0.04	17	18.4	22.0



Dev ice	VZ(V) @ IZ=2mA			ZZ @ IZ = 0.5 mA	ZZ @ IZ = 2 mA	ZZ @ IZ = 10mA	IR@VR	VR	Typical Temperature Coefficient(mV/°C)@ IZ=2mA	
	Min	Nom	Max	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
MMSZ27CW	25.65	27	28.35	295	75	43	0.04	19	21.4	25.3
MMSZ30CW	28.50	30	31.50	295	75	48	0.04	21	24.4	29.4
MMSZ33CW	31.35	33	34.65	320	75	53	0.04	23	27.4	33.4
MMSZ36CW	34.20	36	37.80	345	85	58	0.04	25	30.4	37.4
MMSZ39CW	37.05	39	40.95	345	125	68	0.04	27	33.4	41.2
MMSZ43CW	40.85	43	45.15	370	145	78	0.04	30	37.6	46.6
MMSZ47CW	44.65	47	49.35	370	165	88	0.04	33	42.0	51.8
MMSZ51CW	48.45	51	53.55	395	175	98	0.04	36	46.6	57.2
MMSZ56CW	52.2	56	58.8	420	195	108	0.04	39	52.2	63.8
MMSZ62CW	58.9	62	65.1	445	210	118	0.04	43	58.8	71.6
MMSZ68CW	64.6	68	71.4	470	235	128	0.04	48	65.6	79.8
MMSZ75CW	71.25	75	78.75	495	250	138	0.04	53	73.4	88.6



5. 特性曲线图表

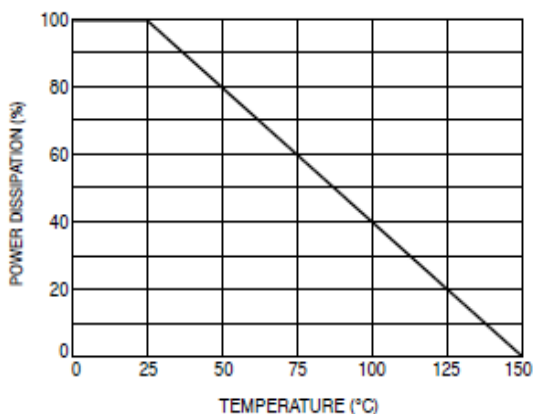


图 1 最大连续功率损耗

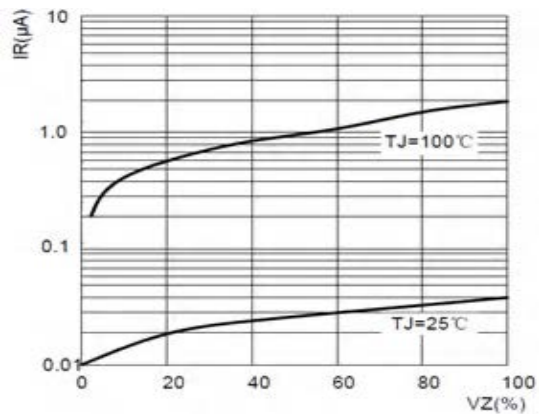


图 2 典型反向特性

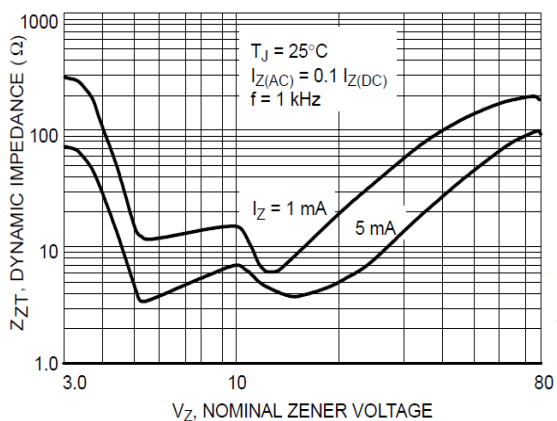


图 3 反向电压与阻抗特性曲线

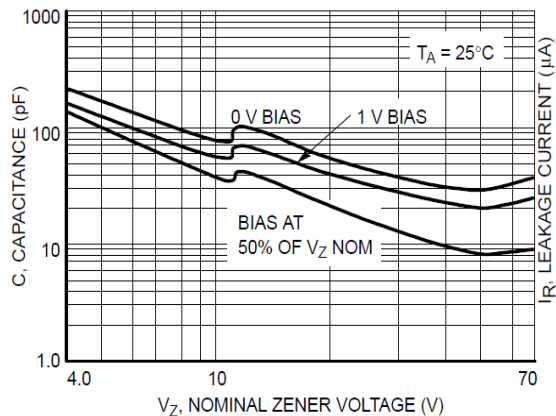
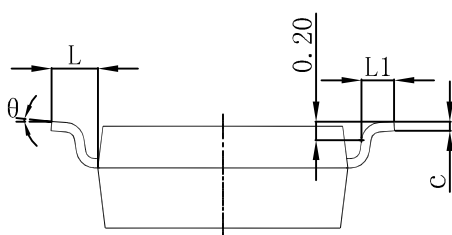
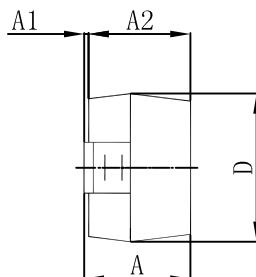
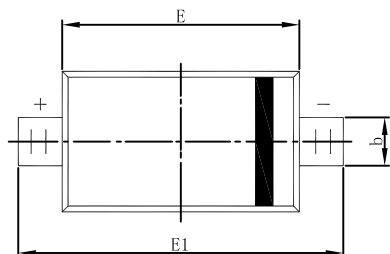


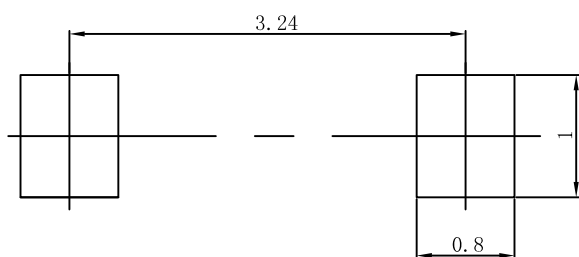
图 4 典型电容特性曲线



SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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