1.主要用途与主要特点

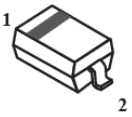
1.1 主要用途

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

Cathode Anode

3. 电参数极限值

除非另有规定，T_{amb}= 25℃

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	P_D	500	mW
热阻	$R_{\theta JA}$	556	℃/W
热阻	$R_{\theta JA}$	417	℃/W
最高工作结温	T_j	150	℃
贮存温度	T_{stg}	-55～150	℃

4. 电参数特性表 除非另有规定，T_{amb}= 25℃

DEVICE	Marking	VZ(V) @ IZ=5mA			ZZ@ IZ1=1mA	ZZ @ IZ2 = 5 mA	ZZ @ IZ3 = 20mA	IR@VR	VR	Typical Temperature Coefficient(mV/℃)@ IZ=5mA	
		MIN	NOM	MAX	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
BZT52C2V4T1G	WX	2.28	2.4	2.60	600	100	50	50	1	-3.5	0
BZT52C2V7T1G	W1	2.57	2.7	2.90	600	100	50	20	1	-3.5	0
BZT52C3V0T1G	W2	2.85	3	3.15	600	95	50	10	1	-3.5	0
BZT52C3V3T1G	W3	3.14	3.3	3.47	600	95	40	5	1	-3.5	0
BZT52C3V6T1G	W4	3.42	3.6	3.78	600	90	40	5	1	-3.5	0
BZT52C3V9T1G	W5	3.71	3.9	4.09	600	90	30	0.5	1	-3.5	0
BZT52C4V3T1G	W6	4.09	4.3	4.52	600	90	30	0.5	1	-3.5	0
BZT52C4V7T1G	W7	4.47	4.7	4.94	500	80	15	3.0	2	-3.5	0.2
BZT52C5V1T1G	W8	4.85	5.1	5.36	480	60	15	2.0	2	-2.7	1.2
BZT52C5V6T1G	W9	5.32	5.6	5.88	400	40	10	1.0	2	-2	2.5
BZT52C6V2T1G	WA	5.89	6.2	6.51	150	9.5	5.7	2.4	4	0.4	3.7
BZT52C6V8T1G	WB	6.46	6.8	7.14	76	14.2	5.7	1.6	4	1.2	4.5
BZT52C7V5T1G	WC	7.13	7.5	7.88	76	14.2	5.7	0.8	5	2.5	5.3
BZT52C8V2T1G	WD	7.79	8.2	8.61	76	14.2	5.7	0.56	5	3.2	6.2
BZT52C9V1T1G	WE	8.65	9.1	9.56	95	14.2	7.6	0.4	7	3.8	7.0
BZT52C10T1G	WF	9.50	10	10.50	142.5	19	9.5	0.1	8	4.5	8.0
BZT52C11T1G	WG	10.45	11	11.55	142.5	19	9.5	0.1	8	5.4	9.0
BZT52C12T1G	WH	11.4	12	12.60	150	23.7	9.5	0.1	8	6.0	10.0
BZT52C13T1G	WI	12.35	13	13.65	190	28.5	14.2	0.1	8	7.0	11.0
BZT52C15T1G	WJ	14.25	15	15.75	190	28.5	19	0.1	11	9.2	13.0
BZT52C16T1G	WK	15.2	16	16.80	190	38	19	0.1	11	10.4	14.0
BZT52C18T1G	WL	17.10	18	18.90	213	42.7	19	0.1	13	12.4	16.0
BZT52C20T1G	WM	19.0	20	21.0	213	52.2	19	0.1	14	14.4	18.0
BZT52C22T1G	WN	20.9	22	23.10	237	52.2	23.7	0.1	15	16.4	20.0
BZT52C24T1G	WO	22.8	24	25.2	250	66.5	23.7	0.1	17	18.4	22.0

4. 电参数特性表 除非另有规定，T_{amb}= 25℃

DEVICE	Marking	VZ(V) @ IZ=2mA			ZZ @ IZ = 0.5 mA	ZZ @ IZ = 2 mA	ZZ @ IZ = 10mA	IR@VR	VR	Typical Temperature Coefficient(mV/℃)@ IZ=2mA	
		MIN	NOM	MAX	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
BZT52C27T1G	WP	25.65	27	28.35	295	75	43	0.04	19	21.4	25.3
BZT52C30T1G	WQ	28.50	30	31.50	295	75	48	0.04	21	24.4	29.4
BZT52C33T1G	WR	31.35	33	34.65	320	75	53	0.04	23	27.4	33.4
BZT52C36T1G	WS	34.20	36	37.80	345	85	58	0.04	25	30.4	37.4
BZT52C39T1G	WT	37.05	39	40.95	345	125	68	0.04	27	33.4	41.2
BZT52C43T1G	WU	40.85	43	45.15	370	145	78	0.04	30	37.6	46.6
BZT52C47T1G	WV	44.65	47	49.35	370	165	88	0.04	33	42.0	51.8
BZT52C51T1G	WW	48.45	51	53.55	395	175	98	0.04	36	46.6	57.2
BZT52C56T1G	XW	52.2	56	58.8	420	195	108	0.04	39	52.2	63.8
BZT52C62T1G	6E	58.9	62	65.1	445	210	118	0.04	43	58.8	71.6
BZT52C68T1G	6F	64.6	68	71.4	470	235	128	0.04	48	65.6	79.8
BZT52C75T1G	6H	71.25	75	78.75	495	250	138	0.04	53	73.4	88.6

5．特性曲线图表

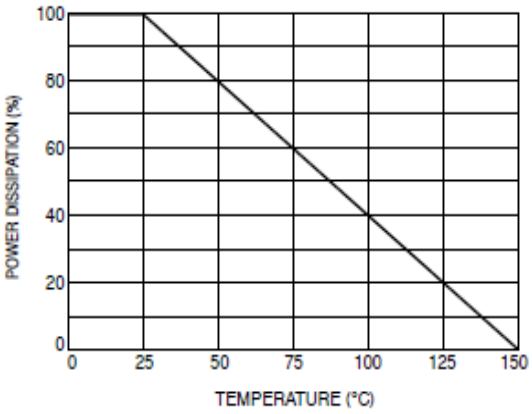


图 1 最大连续功率损耗

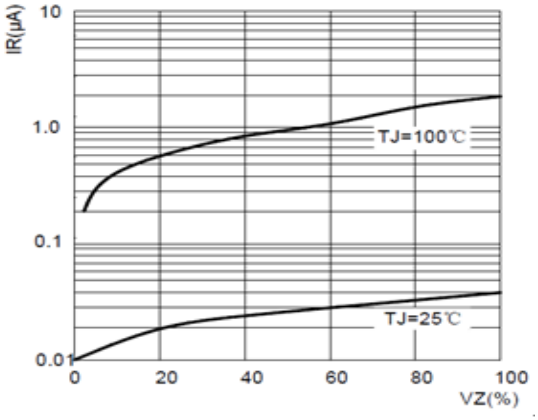


图 2 典型反向特性

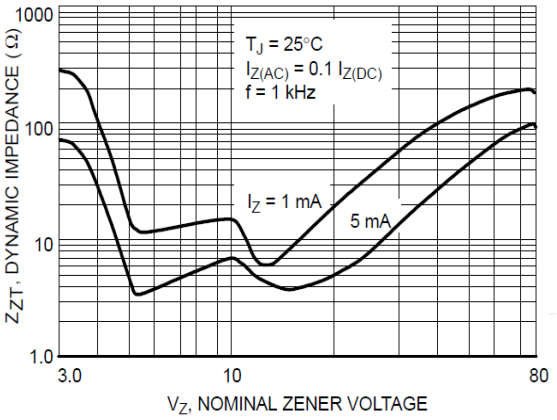


图 3 反向电压与阻抗特性曲线

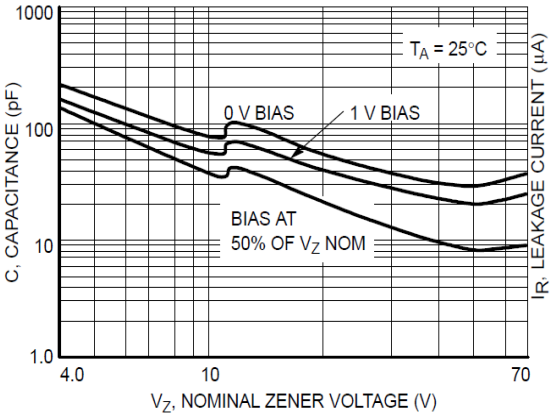
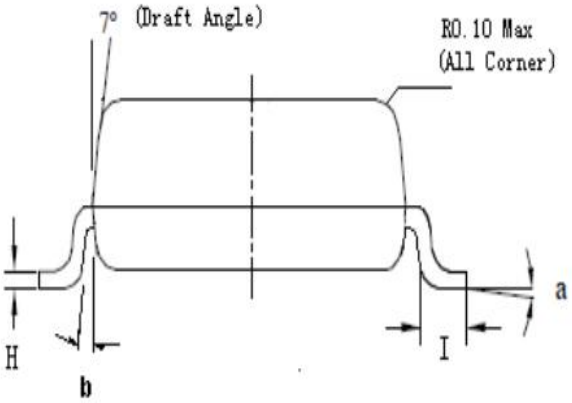
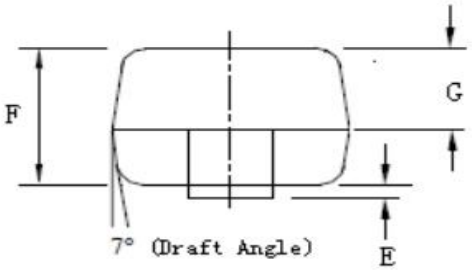
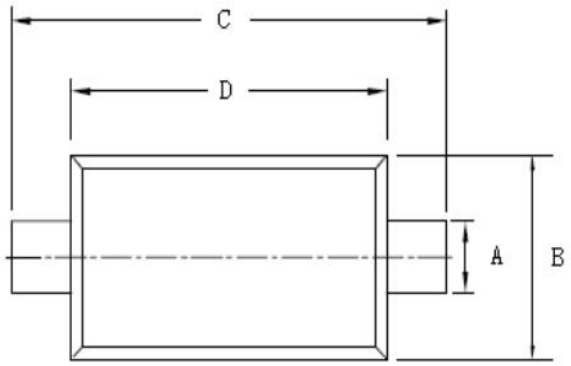


图 4 典型电容特性曲线

SOD123 Package Mechanical Data







Symbol	Dim in mm		
	Min	Nom	Max
A	0.520	0.550	0.570
B	1.400	1.550	1.700
C	3.550	3.650	3.850
D	2.550	2.650	2.850
E	0.000	0.050	0.100
F	1.050	1.100	1.150
G	0.620	0.650	0.670
H	0.090	0.100	0.110
I	0.250	0.350	0.450
a	0°	-	6°
b	0.4°	-	0.8°