

1. 主要用途与主要特点

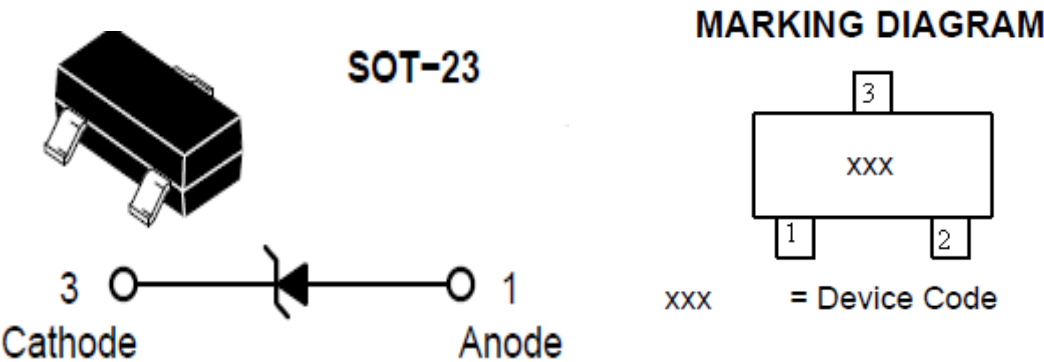
1.1 主要用途

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



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 (FR-5 版, 注 1)	PD	225	mW
热阻 (FR-5 Board, 注 1)	RθJA	556	°C/W
热阻 (AL 基板, 注 2)	RθJA	417	°C/W
最高工作结温	Tj	150	°C
贮存温度	Tstg	-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

5. 电参数特性表

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

DEVICE	VZ(V) @ IZ=5mA			ZZ @ IZ = 1 mA	ZZ @ IZ = 5 mA	ZZ @ IZ = 20mA	IR@VR	VR	Typical Temperature Coefficient(mV/°C)@ IZ=5mA	
	MIN	NOM	MAX	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
BZX84C2V4	2.28	2.4	2.52	570	95	47.5	40	1	-3.5	0
BZX84C2V7	2.57	2.7	2.84	570	95	47.5	16	1	-3.5	0
BZX84C3V0	2.85	3	3.15	570	90	47.5	8	1	-3.5	0
BZX84C3V3	3.14	3.3	3.47	570	90	38	4	1	-3.5	0
BZX84C3V6	3.42	3.6	3.78	570	85	38	4	1	-3.5	0
BZX84C3V9	3.72	3.9	4.08	570	85	28.5	2.4	1	-3.5	0
BZX84C4V3	4.09	4.3	4.52	570	85	28.5	2.4	1	-3.5	0
BZX84C4V7	4.47	4.7	4.94	475	75	14	2.4	2	-3.5	0.2
BZX84C5V1	4.85	5.1	5.36	455	57	14	1.6	2	-2.7	1.2
BZX84C5V6	5.32	5.6	5.88	380	38	9.5	0.8	2	-2	2.5
BZX84C6V2	5.89	6.2	6.51	200	9.5	5.7	2.4	4	0.4	3.7
BZX84C6V8	6.46	6.8	7.14	76	14.2	5.7	1.6	4	1.2	4.5
BZX84C7V5	7.13	7.5	7.88	76	14.2	5.7	0.8	5	2.5	5.3
BZX84C8V2	7.79	8.2	8.61	76	14.2	5.7	0.56	5	3.2	6.2
BZX84C9V1	8.65	9.1	9.56	95	14.2	7.6	0.16	7	3.8	7.0
BZX84C10	9.50	10	10.50	142.5	19	9.5	0.08	8	4.5	8.0
BZX84C11	10.45	11	11.55	142.5	19	9.5	0.08	8	5.4	9.0
BZX84C12	11.4	12	12.60	150	23.7	9.5	0.08	8	6.0	10.0
BZX84C13	12.35	13	13.65	170	28.5	14.2	0.08	8	7.0	11.0
BZX84C15	14.25	15	15.75	190	28.5	19	0.04	11	9.2	13.0
BZX84C16	15.2	16	16.80	190	38	19	0.04	11	10.4	14.0
BZX84C18	17.10	18	18.90	213	42.7	19	0.04	13	12.4	16.0
BZX84C20	19.0	20	21.0	213	52.2	19	0.04	14	14.4	18.0
BZX84C22	20.9	22	23.10	237	52.2	23.7	0.04	15	16.4	20.0
BZX84C24	22.8	24	25.2	---	66.5	23.7	0.04	17	18.4	22.0

DEVICE	VZ(V) @ IZ=2mA	ZZ @	ZZ @	ZZ @	IR@VR	VR	Typical
--------	----------------	------	------	------	-------	----	---------

BZX84C15

				I _Z = 0.5 mA	I _Z = 2 mA	I _Z = 10mA			Temperature Coefficient(mV/°C)@ I _Z =2mA	
	MIN	NOM	MAX	(Ω)	(Ω)	(Ω)	(uA)	V	Min	Max
BZX84C27	25.65	27	28.35	295	75	43	0.04	19	21.4	25.3
BZX84C30	28.50	30	31.50	295	75	48	0.04	21	24.4	29.4
BZX84C33	31.35	33	34.65	320	75	53	0.04	23	27.4	33.4
BZX84C36	34.20	36	37.80	345	85	58	0.04	25	30.4	37.4
BZX84C39	37.05	39	40.95	345	125	68	0.04	27	33.4	41.2
BZX84C43	40.85	43	45.15	370	145	78	0.04	30	37.6	46.6
BZX84C47	44.65	47	49.35	370	165	88	0.04	33	42.0	51.8
BZX84C51	48.45	51	53.55	395	175	98	0.04	36	46.6	57.2
BZX84C56	52.2	56	58.8	420	195	108	0.04	39	52.2	63.8
BZX84C62	58.9	62	65.1	445	210	118	0.04	43	58.8	71.6
BZX84C68	64.6	68	71.4	470	235	128	0.04	48	65.6	79.8
BZX84C75	71.25	75	78.75	495	250	138	0.04	53	73.4	88.6

5. 特性曲线图表

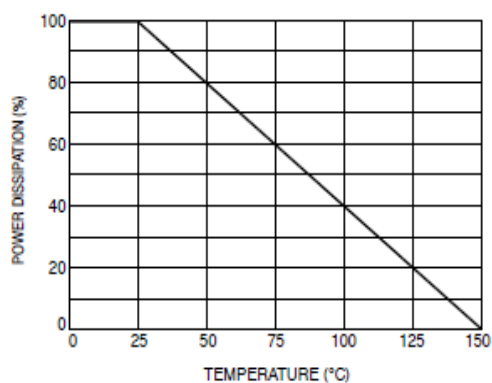


图 1 最大连续功率损耗

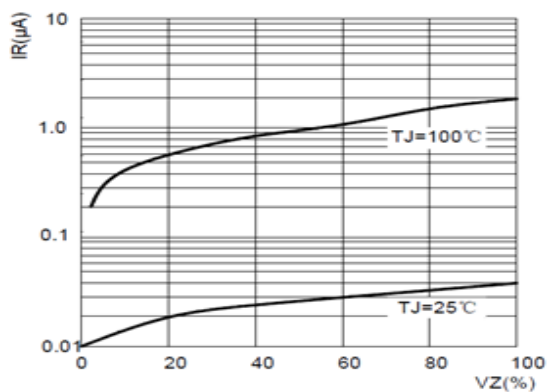


图 2 典型反向特性

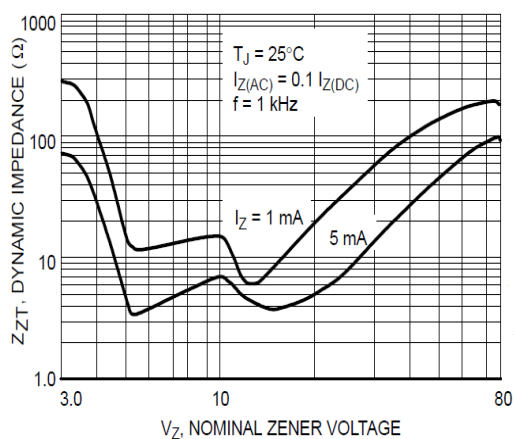


图 3 反向电压与阻抗特性曲线

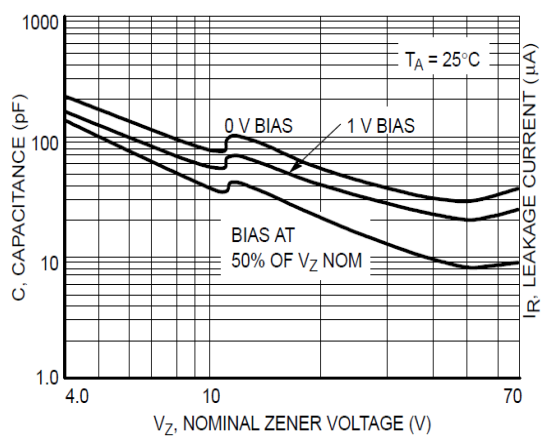
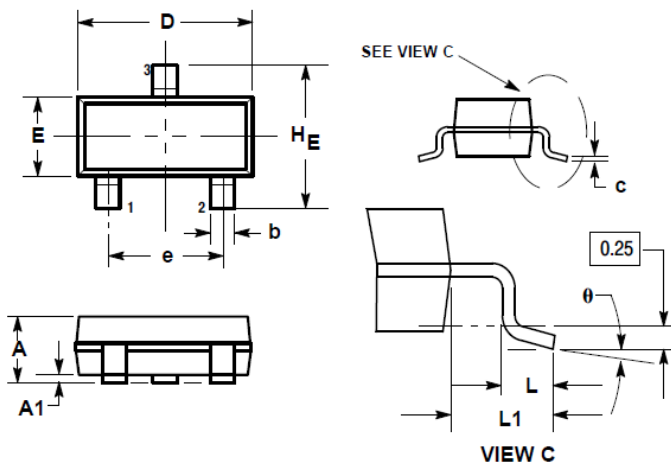


图 4 典型电容特性曲线

SOT-23 (TO-236)



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.
 3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
 4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.10	0.20	0.30	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

- PIN 1. ANODE
2. NO CONNECTION
3. CATHODE

SOLDERING FOOTPRINT*

