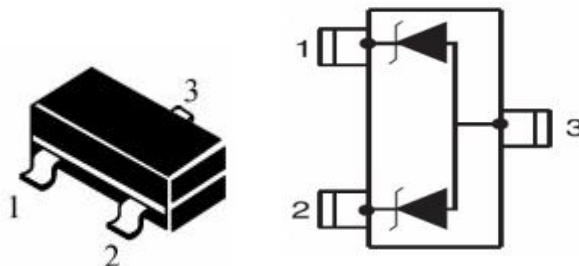




SOT-23 Surface Mounted Dual Common Anode Zener Diode

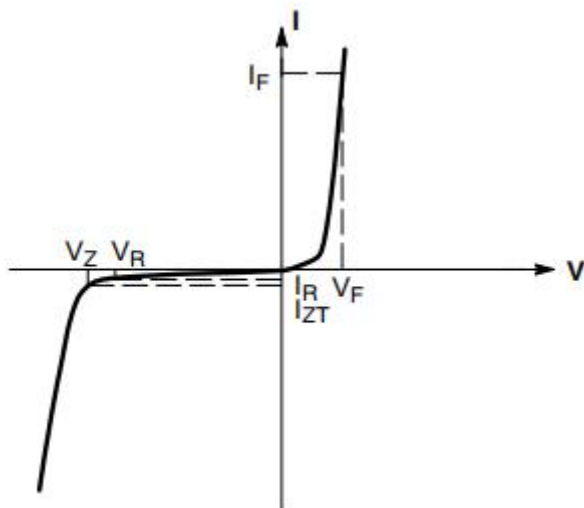
表面贴装共阳双芯稳压二极管

■SOT-23 Internal Configuration 内部结构



■Features 特点

Characteristic 特性参数	Symbol 符号	Max 最大值	Unit 单位
Power dissipation 耗散功率	P_D (FR-5 Board) (Alumina Substrate)	225 300	mW
Forward Current 正向电流	I_F	250	mA
Forward Voltage 正向电压	V_F (@ $I_F=10\text{mA}$)	0.9	V
Reverse Voltage 反向电压	V_Z	2.4-75	V
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	125°C, -55to+125°C	





■ElectriCA-6AFI Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Type	V _Z (V)		DIFFERENTIAL RESISTANCE r _{df} (Ω)				TEMP. COEFF. S _Z (mV/K)			I _R (uA)		Mark ing
	@I _{ZT} =5mA		@I _{ZT} =1mA		@I _{ZT} =5mA		@I _{ZT} =5mA			@V _R (V)		
	MIN.	MAX.	TYP.	MAX.	TYP.	MAX.	MIN.	TYP.	MAX.	I _R	@V _R	
BZX84C2V4CA-6AF	2.2	2.6	325	600	80	100	-3.5	-2.1	0	50	1	7H
BZX84C2V7CA-6AF	2.5	2.9	325	600	80	100	-3.5	-2.1	0	20	1	7J
BZX84C3V0CA-6AF	2.8	3.2	325	600	80	95	-3.5	-2.1	0	10	1	MR
BZX84C3V3CA-6AF	3.1	3.5	350	600	85	95	-3.5	-2.4	0	5	1	MX
BZX84C3V6CA-6AF	3.4	3.8	375	600	85	90	-3.5	-2.4	0	5	1	MY
BZX84C3V9CA-6AF	3.7	4.1	400	600	85	90	-3.5	-2.5	0	3	1	MZ
BZX84C4V3CA-6AF	4.0	4.6	400	600	85	90	-3.5	-2.5	0	3	1	NA
BZX84C4V7CA-6AF	4.4	5.0	410	600	80	90	-3.5	-2.5	0	3	2	NB
BZX84C5V1CA-6AF	4.8	5.4	425	500	50	80	-3.5	-1.4	0.2	2	2	NC
BZX84C5V6CA-6AF	5.2	6.0	400	480	40	60	-2.7	-0.8	1.2	1	2	ND
BZX84C6V2CA-6AF	5.8	6.6	80	400	15	40	-2.0	1.2	2.5	3	4	NE
BZX84C6V8CA-6AF	6.4	7.2	40	150	6	10	0.4	2.3	3.7	2	4	NF
BZX84C7V5CA-6AF	7.0	7.9	30	80	6	15	1.2	3.0	4.5	1	5	NH
BZX84C8V2CA-6AF	7.7	8.7	30	80	6	15	2.5	4.0	5.3	0.7	5	NJ
BZX84C9V1CA-6AF	8.5	9.6	40	80	6	15	3.2	4.6	6.2	0.5	6	NK
BZX84C10CA-6AF	9.4	10.6	40	100	6	15	3.8	5.5	7.0	0.2	7	NM
BZX84C11CA-6AF	10.4	11.6	50	150	8	20	4.5	6.4	8.0	0.1	8	NN
BZX84C12CA-6AF	11.4	12.7	50	150	10	20	5.4	7.4	9.0	0.1	8	NP
BZX84C13CA-6AF	12.4	14.1	50	150	10	25	6.0	8.4	10.0	0.1	8	NX
BZX84C15CA-6AF	13.8	15.6	50	170	10	30	7.0	9.4	11.0	0.05	10.5	NY
BZX84C16CA-6AF	15.3	17.1	50	200	10	30	9.2	11.4	13.0	0.05	11.2	NZ
BZX84C18CA-6AF	16.8	19.1	50	200	10	40	10.4	12.4	14.0	0.05	12.6	PA
BZX84C20CA-6AF	18.8	21.2	50	225	10	45	12.4	14.4	16.0	0.05	14	PB
BZX84C22CA-6AF	20.8	23.3	60	225	15	55	14.4	16.4	18.0	0.05	15.4	PC
BZX84C24CA-6AF	22.8	25.6	60	250	20	55	16.4	18.4	20.0	0.05	16.8	PD
	@I _{ZT} =2mA		@I _{ZT} =0.5mA		@I _{ZT} =2mA		@I _{ZT} =2mA					
BZX84C27CA-6AF	25.1	28.9	65	300	25	80	21.4	23.4	25.3	0.05	18.9	PE
BZX84C30CA-6AF	28.0	32.0	70	300	30	80	24.4	26.6	29.4	0.05	21	PF
BZX84C33CA-6AF	31.0	35.0	75	325	35	80	27.4	29.7	33.4	0.05	23.1	PH
BZX84C36CA-6AF	34.0	38.0	80	350	35	90	30.4	33.0	37.4	0.05	25.2	PJ
BZX84C39CA-6AF	37.0	41.0	80	350	40	130	33.4	36.4	41.2	0.05	27.3	PM
BZX84C43CA-6AF	40.0	46.0	85	375	45	150	37.6	41.2	46.6	0.05	30.1	PN
BZX84C47CA-6AF	44.0	50.0	85	375	50	170	42.0	46.1	51.8	0.05	32.9	PP
BZX84C51CA-6AF	48.0	54.0	95	400	60	180	46.6	51.3	57.2	0.05	35.7	7K
BZX84C56CA-6AF	52.0	60.0	110	425	75	200	52.2	58.4	63.8	0.05	39.2	7M
BZX84C62CA-6AF	58.0	66.0	130	450	90	215	58.8	63.9	71.6	0.05	43.4	7N
BZX84C68CA-6AF	64.0	72.0	160	475	110	240	65.6	72.2	79.8	0.05	47.6	7P
BZX84C75CA-6AF	70.0	79.0	200	500	150	255	73.4	81.1	88.6	0.05	52.5	7R

■TypiCA-6AFI Characteristic Curve 典型特性曲线

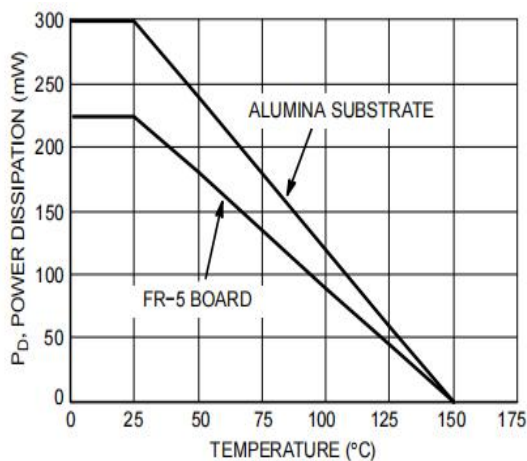


Figure 1: Power Derating Curve

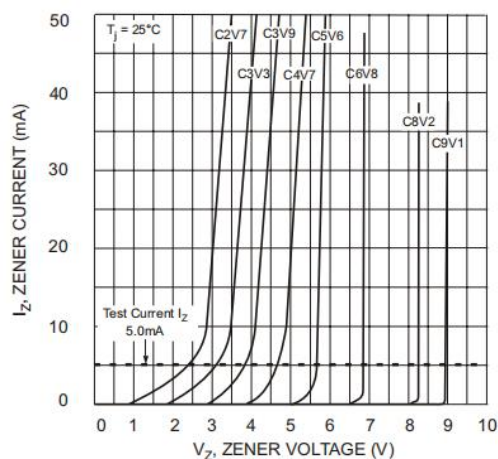


Figure 2: Zener Breakdown Characteristics

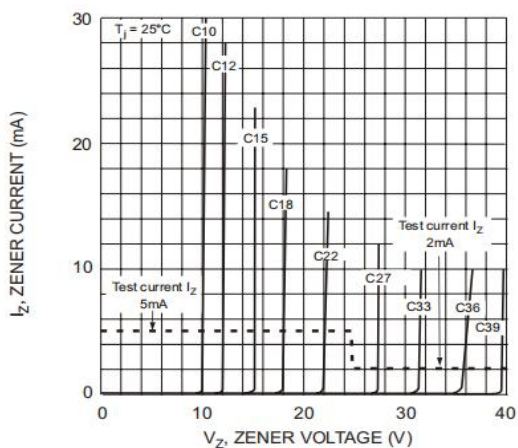


Figure 3: Zener Breakdown Characteristics

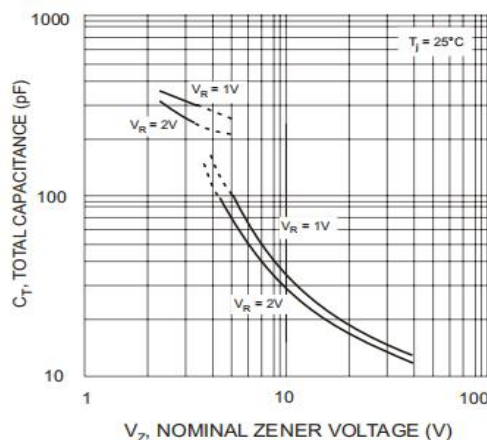


Figure 4: CA-6AF capacitance Characteristics

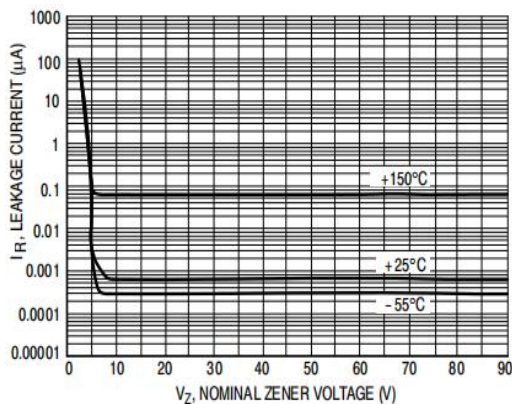
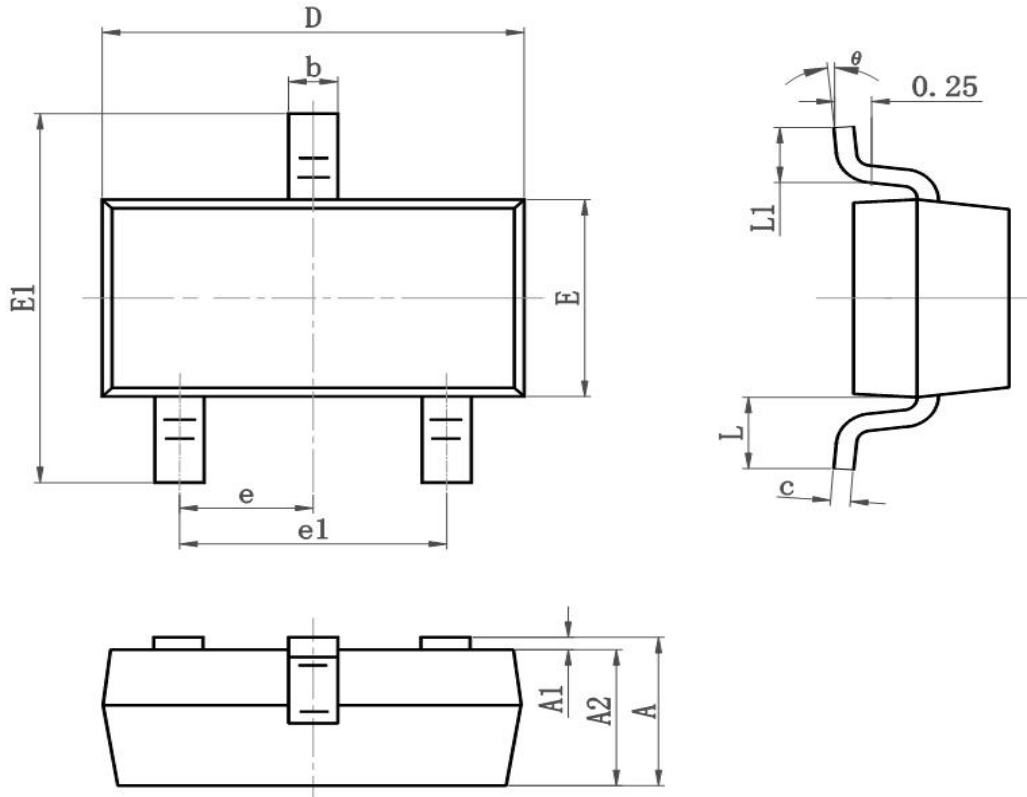


Figure 5: Leakage Current

■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.050	0.055
E1	2.250	2.550	0.089	0.100
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°