

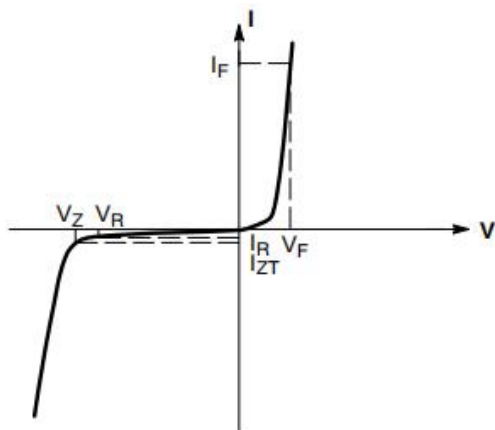
SOT-23 Surface Mounted Zener Diode 表面贴装稳压二极管

■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 ($T_a=25^\circ\text{C}$)	350	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	2.4-39	V
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	125 $^\circ\text{C}$, -55to+125 $^\circ\text{C}$	



■Electrical Characteristics 电特性

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

Number	V _Z (V)@I _Z			Z _Z (Ω) @I _Z	I _Z (mA)	Z _{ZK} (Ω) @I _{ZK}	I _{ZK} (mA)	I _R (μ A) @V _R	V _R (V)	I _{ZRM} (mA)	Marking
	Nom.	Min.	Max.								
MMBZ5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1	188	18A
MMBZ5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1	180	18B
MMBZ5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1	167	18C
MMBZ5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1	160	18D
MMBZ5225B	3	2.85	3.15	30	20	1600	0.25	50	1	150	18E
MMBZ5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1	138	8A
MMBZ5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1	126	8B
MMBZ5228B	3.9	3.71	4.1	23	20	1900	0.25	10	1	115	8C
MMBZ5229B	4.3	4.09	4.52	22	20	2000	0.25	5	1	106	8D
MMBZ5230B	4.7	4.47	4.94	19	20	1900	0.25	5	2	97	8E
MMBZ5231B	5.1	4.85	5.36	17	20	1600	0.25	5	2	89	8F
MMBZ5232B	5.6	5.32	5.88	11	20	1600	0.25	5	3	81	8G
MMBZ5233B	6.0	5.7	6.3	7	20	1600	0.25	5	3.5	77	8H
MMBZ5234B	6.2	5.89	6.51	7	20	1000	0.25	5	4	73	8J
MMBZ5235B	6.8	6.46	7.14	5	20	750	0.25	3	5	67	8K
MMBZ5236B	7.5	7.13	7.88	6	20	500	0.25	3	6	61	8L
MMBZ5237B	8.2	7.79	8.61	8	20	500	0.25	3	6	55	8M
MMBZ5238B	8.7	8.27	9.13	8	20	600	0.25	3	6	52	8N
MMBZ5239B	9.1	8.65	9.56	10	20	600	0.25	3	6.5	50	8P
MMBZ5240B	10	9.5	10.5	17	20	600	0.25	3	8	45	8Q
MMBZ5241B	11	10.45	11.55	22	20	600	0.25	3	8.4	41	8R
MMBZ5242B	12	11.4	12.6	30	20	600	0.25	2	9.1	38	8S
MMBZ5243B	13	12.35	13.65	13	9.5	600	0.25	1	9.9	35	8T
MMBZ5244B	14	13.3	14.7	15	9	600	0.25	1	10.5	33	8U
MMBZ5245B	15	14.25	15.75	16	8.5	600	0.25	0.5	11	30	8V
MMBZ5246B	16	15.2	16.8	17	7.8	600	0.25	0.1	12	28	8W
MMBZ5247B	17	16.15	17.85	19	7.4	600	0.25	0.1	13	26	8X
MMBZ5248B	18	17.1	18.9	21	7	600	0.25	0.1	14	25	8Y
MMBZ5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14	24	8Z
MMBZ5250B	20	19	21	25	6.2	600	0.25	0.1	15	23	81A
MMBZ5251B	22	20.9	23.1	29	5.6	600	0.25	0.1	17	21	81B
MMBZ5252B	24	22.8	25.2	33	5.2	600	0.25	0.1	18	19.1	81C
MMBZ5253B	25	23.75	26.25	35	5	600	0.25	0.1	19	17.9	81D
MMBZ5254B	27	25.65	28.35	41	5	600	0.25	0.1	21	16.8	81E
MMBZ5255B	28	26.6	29.4	44	4.5	600	0.25	0.1	21	16.2	81F
MMBZ5256B	30	28.5	31.5	49	4.2	600	0.25	0.1	23	15.1	81G
MMBZ5257B	33	31.35	34.65	58	3.8	700	0.25	0.1	25	13.8	81H
MMBZ5258B	36	34.2	37.8	70	3.4	700	0.25	0.1	27	12.6	81J
MMBZ5259B	39	37.05	40.95	80	3.2	800	0.25	0.1	30	11.6	81K

■ Typical Characteristic Curve 典型特性曲线

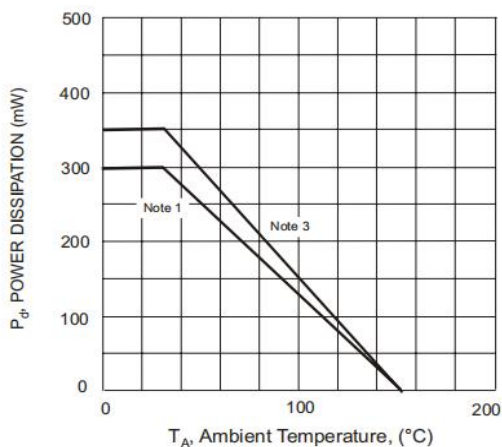


Figure 1: Power Derating Curve

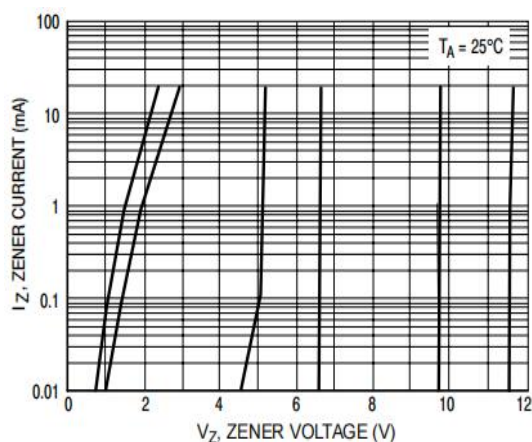


Figure 2: Zener Breakdown Characteristics

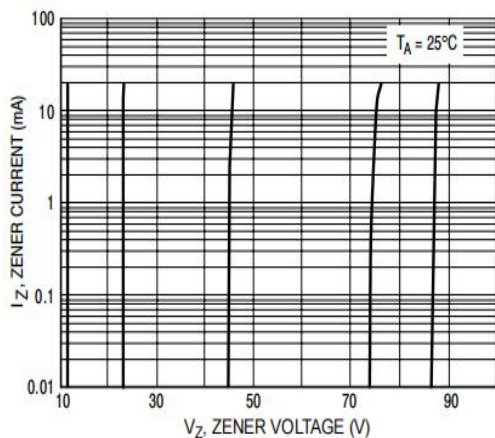


Figure 3: Zener Breakdown Characteristics

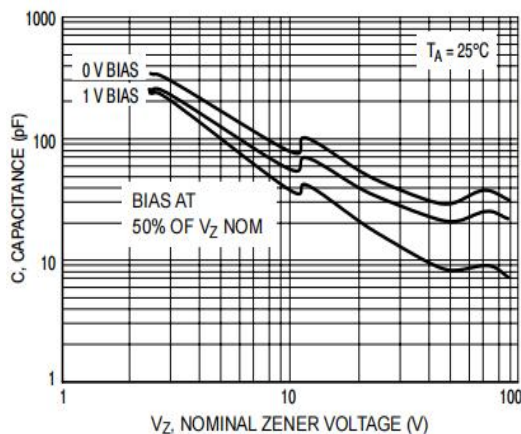


Figure 4: Capacitance Characteristics

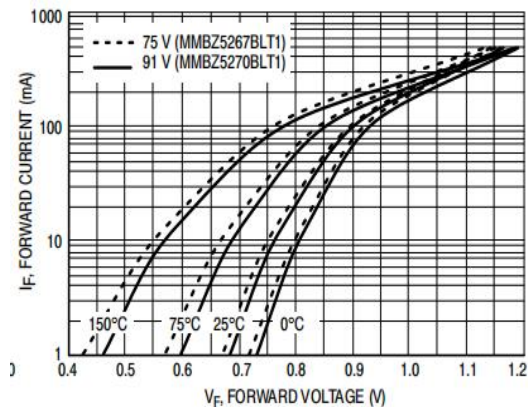


Figure 5: Forward Characteristics

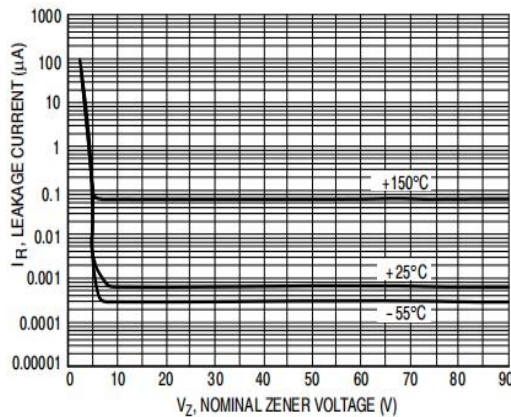
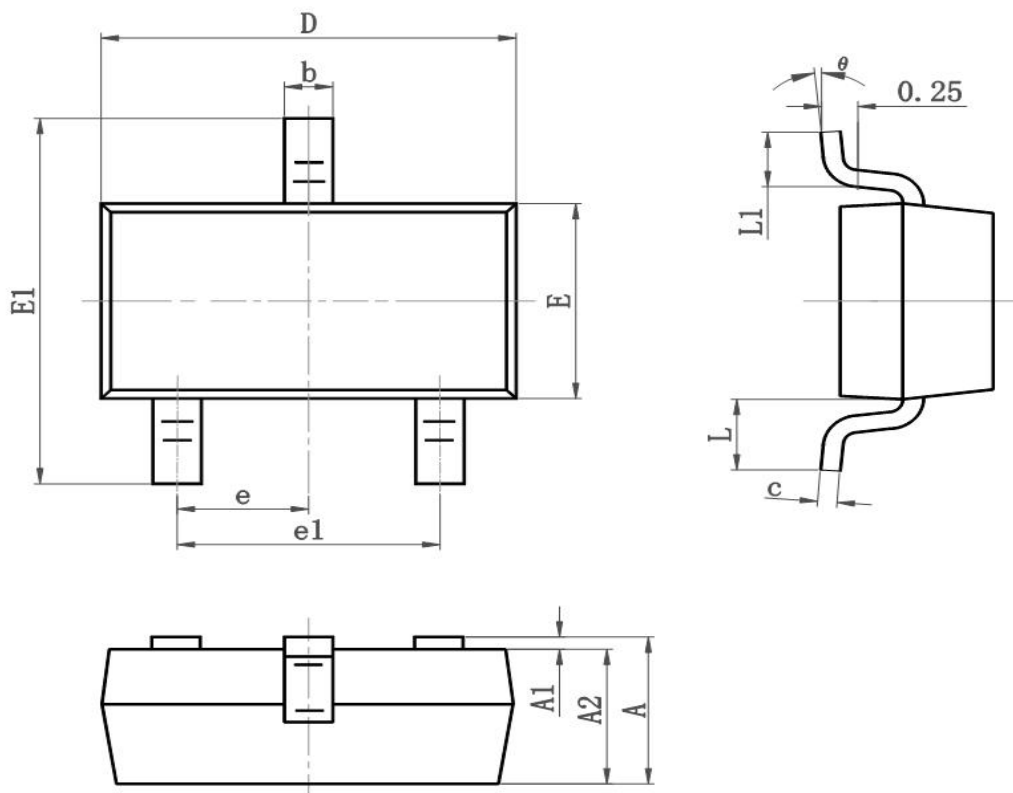


Figure 6: Leakage Current

■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°