

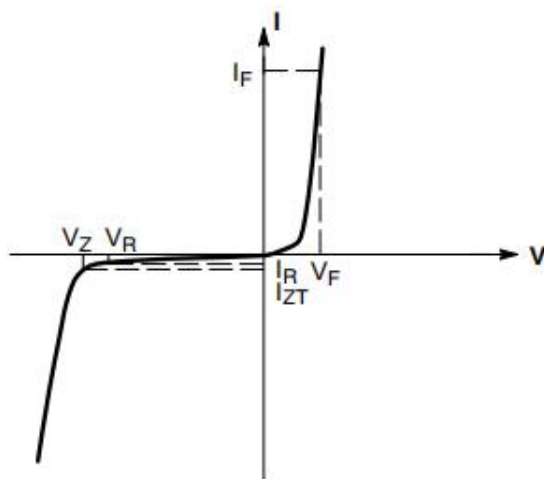
SOD-123 Surface Mounted Zener Diode 表面贴装稳压二极管

■SOD-123 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 ($T_a=25^\circ\text{C}$)	500	mW
Forward Current 正向电流	I_F	250	mA
Reverse Zener Current 反向稳压电流	I_{ZRM}	188-11.6	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°C, -55to+125°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 (uA) @V _R	V _R (V)	I _{ZRM} (mA)	Code
	Nom.	Min.	Max.								
MMSZ5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1	188	C1
MMSZ5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1	180	C2
MMSZ5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1	167	C3
MMSZ5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1	160	C4
MMSZ5225B	3	2.85	3.15	30	20	1600	0.25	50	1	150	C5
MMSZ5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1	138	G1
MMSZ5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1	126	G2
MMSZ5228B	3.9	3.71	4.1	23	20	1900	0.25	10	1	115	G3
MMSZ5229B	4.3	4.09	4.52	22	20	2000	0.25	5	1	106	G4
MMSZ5230B	4.7	4.47	4.94	19	20	1900	0.25	5	2	97	G5
MMSZ5231B	5.1	4.85	5.36	17	20	1600	0.25	5	2	89	E1
MMSZ5232B	5.6	5.32	5.88	11	20	1600	0.25	5	3	81	E2
MMSZ5233B	6.0	5.7	6.3	7	20	1600	0.25	5	3.5	77	E3
MMSZ5234B	6.2	5.89	6.51	7	20	1000	0.25	5	4	73	E4
MMSZ5235B	6.8	6.46	7.14	5	20	750	0.25	3	5	67	E5
MMSZ5236B	7.5	7.13	7.88	6	20	500	0.25	3	6	61	F1
MMSZ5237B	8.2	7.79	8.61	8	20	500	0.25	3	6	55	F2
MMSZ5238B	8.7	8.27	9.13	8	20	600	0.25	3	6	52	F3
MMSZ5239B	9.1	8.65	9.56	10	20	600	0.25	3	6.5	50	F4
MMSZ5240B	10	9.5	10.5	17	20	600	0.25	3	8	45	F5
MMSZ5241B	11	10.45	11.55	22	20	600	0.25	3	8.4	41	H1
MMSZ5242B	12	11.4	12.6	30	20	600	0.25	2	9.1	38	H2
MMSZ5243B	13	12.35	13.65	13	9.5	600	0.25	1	9.9	35	H3
MMSZ5244B	14	13.3	14.7	15	9	600	0.25	1	10.5	33	H4
MMSZ5245B	15	14.25	15.75	16	8.5	600	0.25	0.5	11	30	H5
MMSZ5246B	16	15.2	16.8	17	7.8	600	0.25	0.1	12	28	J1
MMSZ5247B	17	16.15	17.85	19	7.4	600	0.25	0.1	13	26	J2
MMSZ5248B	18	17.1	18.9	21	7	600	0.25	0.1	14	25	J3
MMSZ5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14	24	J4
MMSZ5250B	20	19	21	25	6.2	600	0.25	0.1	15	23	J5
MMSZ5251B	22	20.9	23.1	29	5.6	600	0.25	0.1	17	21	K1
MMSZ5252B	24	22.8	25.2	33	5.2	600	0.25	0.1	18	19.1	K2
MMSZ5253B	25	23.75	26.25	35	5	600	0.25	0.1	19	17.9	K3
MMSZ5254B	27	25.65	28.35	41	5	600	0.25	0.1	21	16.8	K4
MMSZ5255B	28	26.6	29.4	44	4.5	600	0.25	0.1	21	16.2	K5
MMSZ5256B	30	28.5	31.5	49	4.2	600	0.25	0.1	23	15.1	M1
MMSZ5257B	33	31.35	34.65	58	3.8	700	0.25	0.1	25	13.8	M2
MMSZ5258B	36	34.2	37.8	70	3.4	700	0.25	0.1	27	12.6	M3
MMSZ5259B	39	37.05	40.95	80	3.2	800	0.25	0.1	30	11.6	M4

■ Typical Characteristic Curve 典型特性曲线

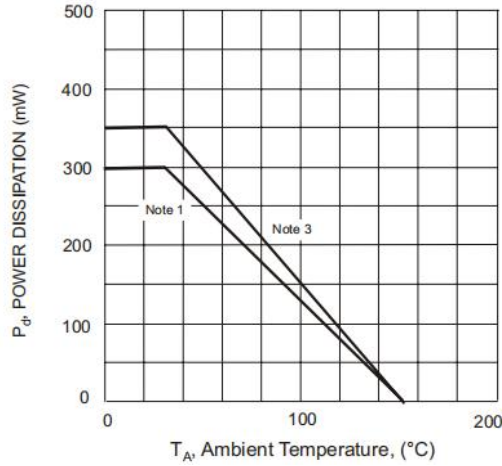


Figure 1: Power Derating Curve

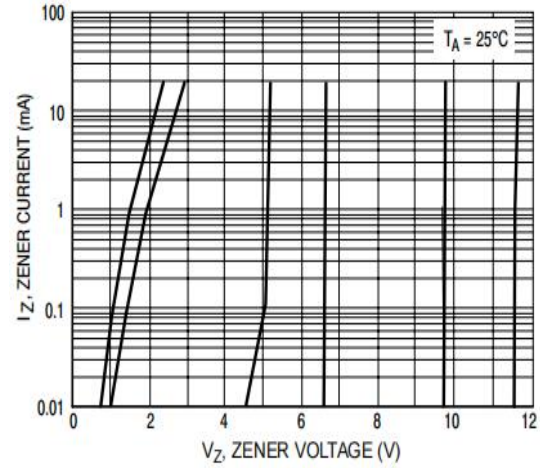


Figure 2: Zener Breakdown Characteristics

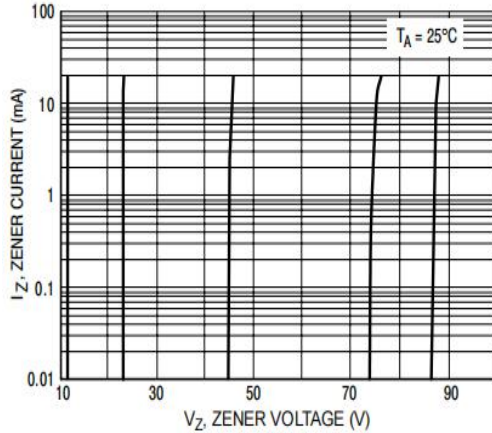


Figure 3: Zener Breakdown Characteristics

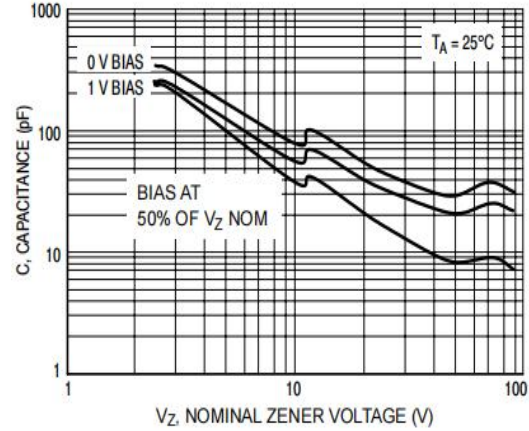


Figure 4: Capacitance Characteristics

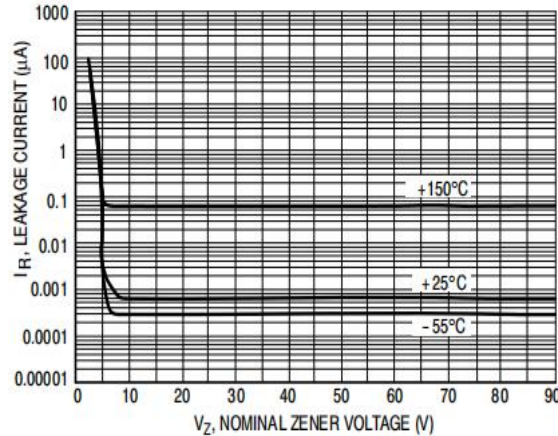
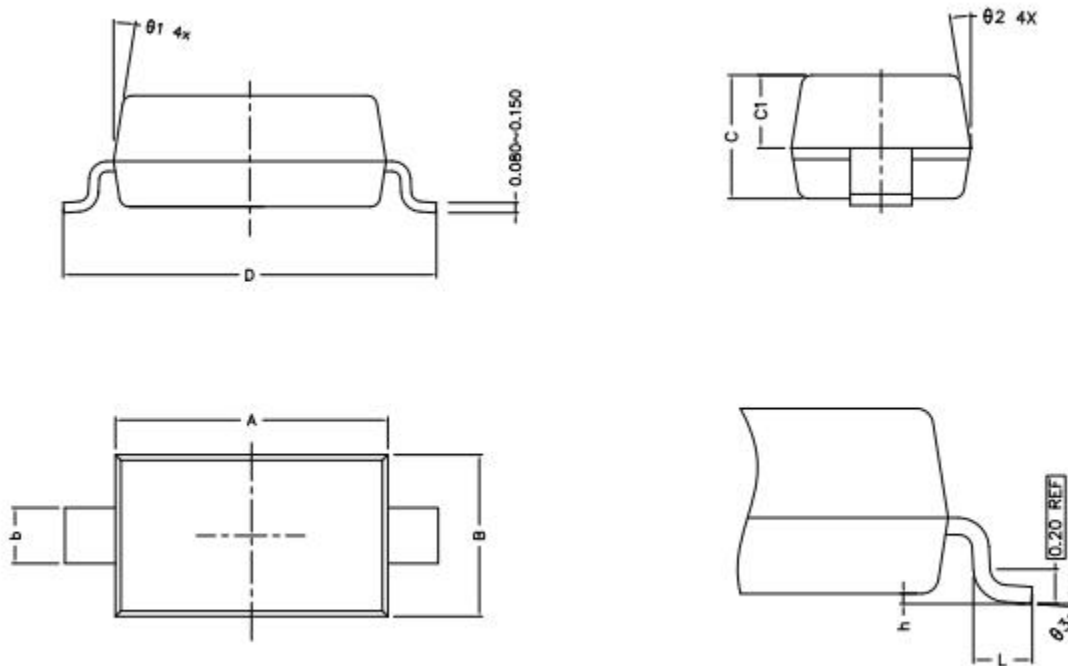


Figure 5: Leakage Current

■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.600	2.800	0.102	0.110
B	1.500	1.700	0.059	0.067
C	1.050	1.150	0.041	0.045
C1	0.600	0.700	0.024	0.028
D	3.550	3.850	0.140	0.152
L	0.250	0.450	0.010	0.018
b	0.450	0.650	0.018	0.026
h	0.020	0.120	0.001	0.005
θ 3	0°	7°	0°	7°