



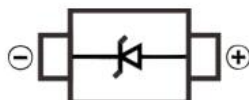
# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

MM1Z2V0-MM1Z75

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

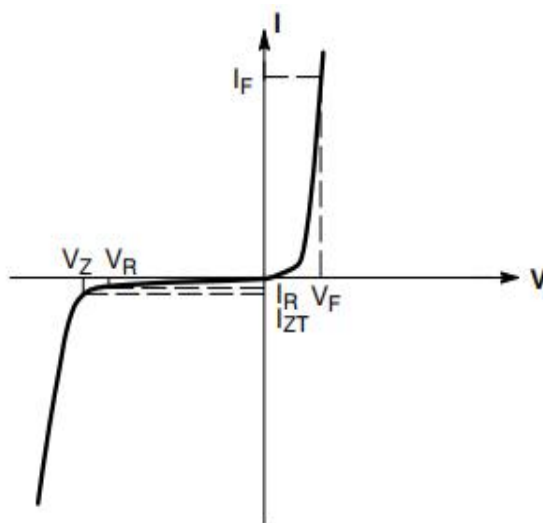
## ■SOD-123 Internal Configuration 内部结构



## ■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 Voltage 正向电压	$V_F(@ I_F=10\text{mA})$	0.9	V
Reverse Voltage 反向电压	$V_Z$	2.0-75	V
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	340	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	$T_J, T_{stg}$	150 $^\circ\text{C}$ , -55to+150 $^\circ\text{C}$	

ELECTRICAL CHARACTERISTICS	
SYMBOL	PARAMETER
$V_Z$	Reverse Zener voltage at $I_{ZT}$
$I_{ZT}$	Reverse current
$Z_{ZT}$	Maximum Zener impedance at $I_{ZT}$
$I_{ZK}$	Reverse current
$Z_{ZK}$	Maximum Zener impedance at $I_{ZK}$
$I_R$	Reverse leakage current at $V_R$
$V_R$	Reverse voltage
$I_F$	Forward current
$V_F$	Forward voltage at $I_F$
$I_{ZM}$	Maximum DC Zener current



## ■Electrical Characteristics 电特性

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



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Type Number	V <sub>Z</sub> (V)@I <sub>ZT</sub>			I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> (Ω) @I <sub>ZT</sub>	I <sub>R</sub> (uA) @V <sub>R</sub>	V <sub>R</sub> (V)	Marking
	Nom.	Min.	Max.					
MM1Z2V0	2.0	1.8	2.15	5	100	120	0.5	4A
MM1Z2V2	2.2	2.08	2.33	5	100	120	0.7	4B
MM1Z2V4	2.4	2.28	2.56	5	100	120	1	4C
MM1Z2V7	2.7	2.5	2.9	5	110	120	1	4D
MM1Z3V0	3.0	2.8	3.2	5	120	50	1	4E
MM1Z3V3	3.3	3.1	3.5	5	130	20	1	4F
MM1Z3V6	3.6	3.4	3.8	5	130	10	1	4H
MM1Z3V9	3.9	3.7	4.1	5	130	5	1	4J
MM1Z4V3	4.3	4.0	4.6	5	130	5	1	4K
MM1Z4V7	4.7	4.4	5.0	5	130	2	1	4M
MM1Z5V1	5.1	4.8	5.4	5	130	2	1	4N
MM1Z5V6	5.6	5.2	6.0	5	80	1	2	4P
MM1Z6V2	6.2	5.8	6.6	5	50	1	3	4R
MM1Z6V8	6.8	6.4	7.2	5	30	0.5	4	4X
MM1Z7V5	7.5	7.0	7.9	5	30	0.5	5	4Y
MM1Z8V2	8.2	7.7	8.7	5	30	0.5	6	4Z
MM1Z9V1	9.1	8.5	9.6	5	30	0.5	7	5A
MM1Z10	10	9.4	10.6	5	30	0.1	7	5B
MM1Z11	11	10.4	11.6	5	30	0.1	8	5C
MM1Z12	12	11.4	12.7	5	35	0.1	9	5D
MM1Z13	13	12.4	14.1	5	35	0.1	10	5E
MM1Z15	15	13.8	16.2	5	40	0.1	11	5F
MM1Z16	16	15.3	17.1	5	40	0.1	12	5H
MM1Z18	18	16.8	19.1	5	45	0.1	13	5J
MM1Z20	20	18.8	21.2	5	50	0.1	15	5K
MM1Z22	22	20.8	23.3	5	55	0.1	17	5M
MM1Z24	24	22.8	25.6	5	60	0.1	18	5N
MM1Z27	27	25.1	28.9	2	70	0.1	21	5P
MM1Z30	30	28	32	2	80	0.1	23	5R
MM1Z33	33	31	35	2	80	0.1	25	5X
MM1Z36	36	34	38	2	90	0.1	27	5Y
MM1Z39	39	37	41	2	100	0.1	30	5Z
MM1Z43	43	40	46	2	130	0.1	32	6A
MM1Z47	47	44	50	2	150	0.1	35	6B
MM1Z51	51	48	54	2	180	0.1	38	6C
MM1Z56	56	52	60	2	200	0.1	42	6D
MM1Z62	62	58	66	2	215	0.1	47	6E
MM1Z68	68	64	72	2	240	0.1	52	6F
MM1Z75	75	70	79	2	265	0.1	56	6H

## ■ Typical Characteristic Curve 典型特性曲线

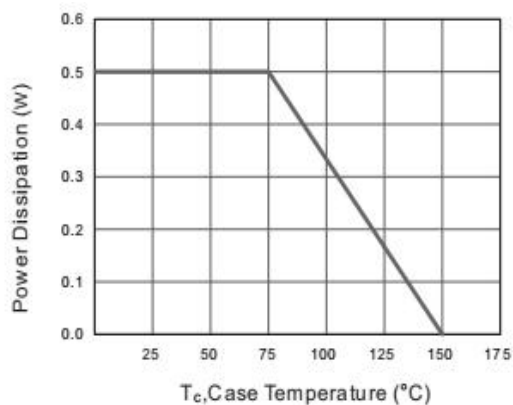


Figure 1: Power Derating Curve

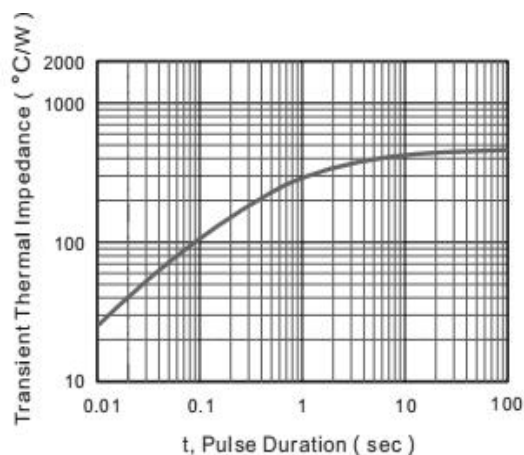
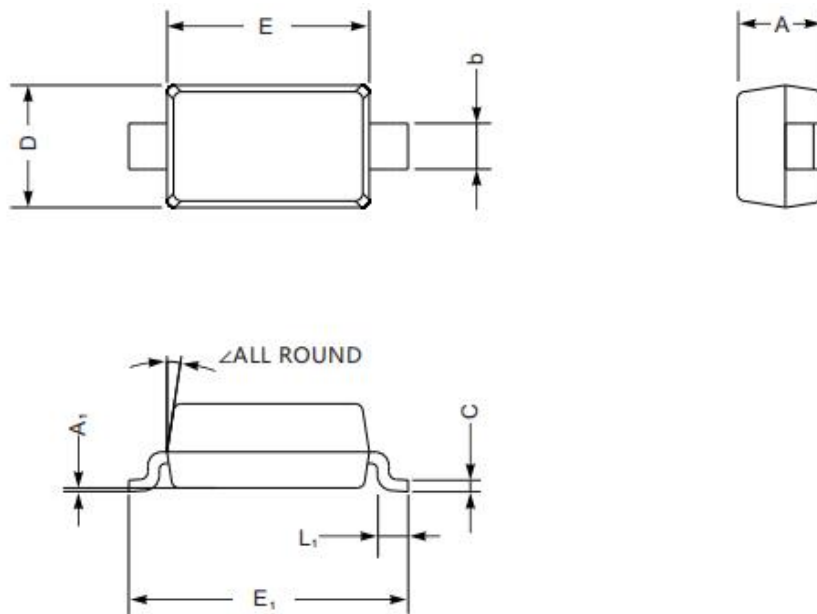


Figure 2: Zener Impedance Characteristics

## ■ Dimension 外形封装尺寸



UNIT		A	C	D	E	E <sub>1</sub>	L <sub>1</sub>	b	A <sub>1</sub>	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	