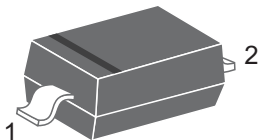
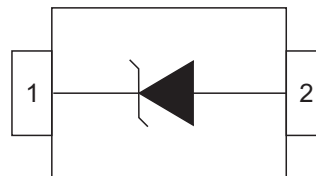


ZENER VOLTAGE REGULATORS

SOD-123



Pin Configuration



Features

- Ideally suited for automated assembly processes
- Total power dissipation: max. 500 mW

Device Marking And Ordering Information

Device	Package	Shipping
MM1ZxxC Series	SOD-123	3000pcs/Tape&Reel

Maximum Ratings

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thJA}	250	°C/W
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Type	Marking Code	Zener Voltage Range ¹⁾			Dynamic Impedance				Reverse Leakage Current	
		V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
		V	V	mA	Max. (Ω)	mA	Max. (Ω)	mA	Max. (μA)	V
MM1Z2V0C	WY	2.0	1.80...2.15	5	150	5	600	1	100	1
MM1Z2V4C	MH/WX	2.4	2.2...2.6	5	100	5	600	1	50	1
MM1Z2V7C	MJ/ W1	2.7	2.5...2.9	5	100	5	600	1	20	1
MM1Z3V0C	MK/W2	3.0	2.8...3.2	5	95	5	600	1	10	1
MM1Z3V3C	MM/W3	3.3	3.1...3.5	5	95	5	600	1	5	1
MM1Z3V6C	MN/W4	3.6	3.4...3.8	5	90	5	600	1	5	1
MM1Z3V9C	MP/W5	3.9	3.7...4.1	5	90	5	600	1	3	1
MM1Z4V3C	MR/ W6	4.3	4...4.6	5	90	5	600	1	3	1
MM1Z4V7C	MX/ W7	4.7	4.4...5	5	80	5	500	1	3	2
MM1Z5V1C	MY/ W8	5.1	4.8...5.4	5	60	5	480	1	2	2
MM1Z5V6C	MZ/ W9	5.6	5.2...6	5	40	5	400	1	1	2
MM1Z6V2C	NA/ WA	6.2	5.8...6.6	5	10	5	150	1	3	4
MM1Z6V8C	NB/ WB	6.8	6.4...7.2	5	15	5	80	1	2	4
MM1Z7V5C	NC/ WC	7.5	7...7.9	5	15	5	80	1	1	5
MM1Z8V2C	ND/ WD	8.2	7.7...8.7	5	15	5	80	1	0.7	5
MM1Z9V1C	NE/ WE	9.1	8.5...9.6	5	15	5	100	1	0.5	6
MM1Z10C	NF/ WF	10	9.4...10.6	5	20	5	150	1	0.2	7
MM1Z11C	NH/ WG	11	10.4...11.6	5	20	5	150	1	0.1	8
MM1Z12C	NJ/ WH	12	11.4...12.7	5	25	5	150	1	0.1	8
MM1Z13C	NK/ WI	13	12.4...14.1	5	30	5	170	1	0.1	8
MM1Z15C	NM/ WJ	15	13.8...15.6	5	30	5	200	1	0.1	10.5
MM1Z16C	NN/ WK	16	15.3...17.1	5	40	5	200	1	0.1	11.2
MM1Z18C	NP/ WL	18	16.8...19.1	5	45	5	225	1	0.1	12.6
MM1Z20C	NR/ WM	20	18.8...21.2	5	55	5	225	1	0.1	14
MM1Z22C	NX/ WN	22	20.8...23.3	5	55	5	250	1	0.1	15.4
MM1Z24C	NY/ WO	24	22.8...25.6	5	70	5	250	1	0.1	16.8
MM1Z27C	NZ/ WP	27	25.1...28.9	2	80	2	300	0.5	0.1	18.9
MM1Z30C	PA/ WQ	30	28...32	2	80	2	300	0.5	0.1	21
MM1Z33C	PB/ WR	33	31...35	2	80	2	325	0.5	0.1	23.1
MM1Z36C	PC/ WS	36	34...38	2	90	2	350	0.5	0.1	25.2
MM1Z39C	PD/ WT	39	37...41	2	130	2	350	0.5	0.1	27.3
MM1Z43C	6A/ WU	43	40...46	2.5	130	2	500	1	2	33
MM1Z47C	6B/ WV	47	44...50	2.5	150	2	500	1	2	36
MM1Z51C	6C/ WW	51	48...54	2.5	180	2	500	1	1	39
MM1Z56C	6D/ W4	56	52...60	2.5	180	2	500	1	1	43
MM1Z62C	6E	62	58...66	2.5	200	2	500	1	0.2	47
MM1Z68C	6F	68	64...72	2.5	250	2	500	1	0.2	52
MM1Z75C	6H	75	70...79	2.5	300	2	500	1	0.2	57

¹⁾ V_{ZT} is tested with pulses (20 ms).

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

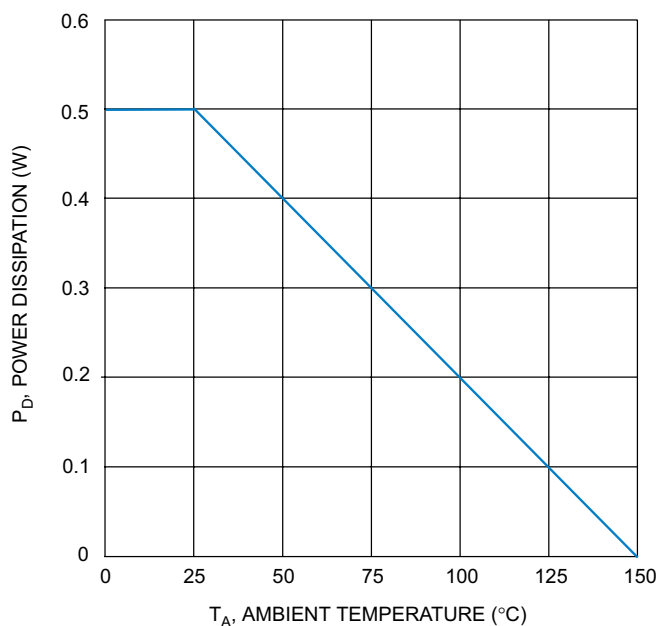


Fig. 1 Power Dissipation vs Ambient Temperature

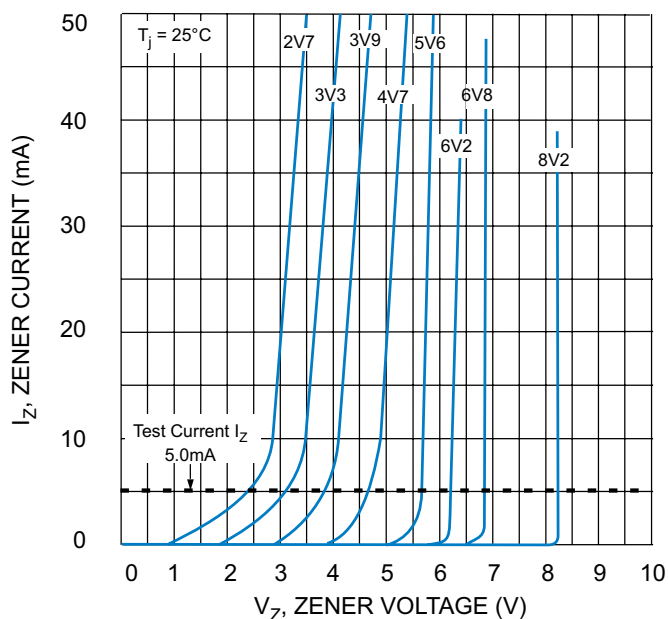


Fig. 2 Zener Breakdown Characteristics

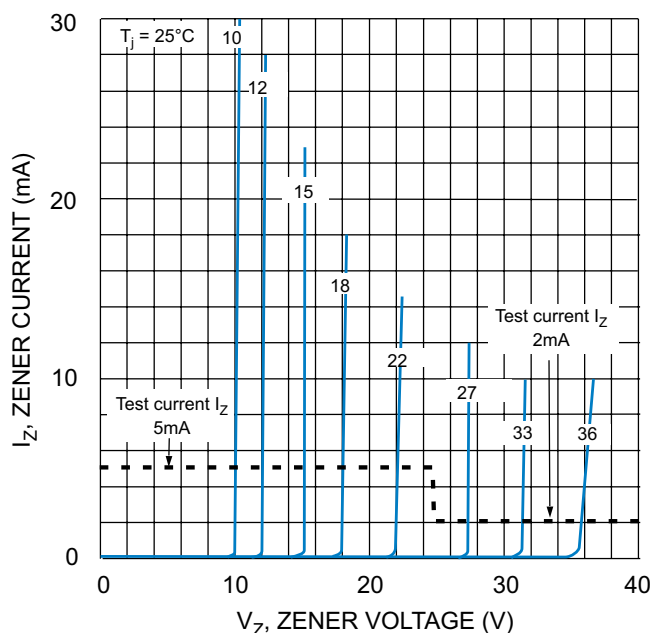


Fig. 3 Zener Breakdown Characteristics

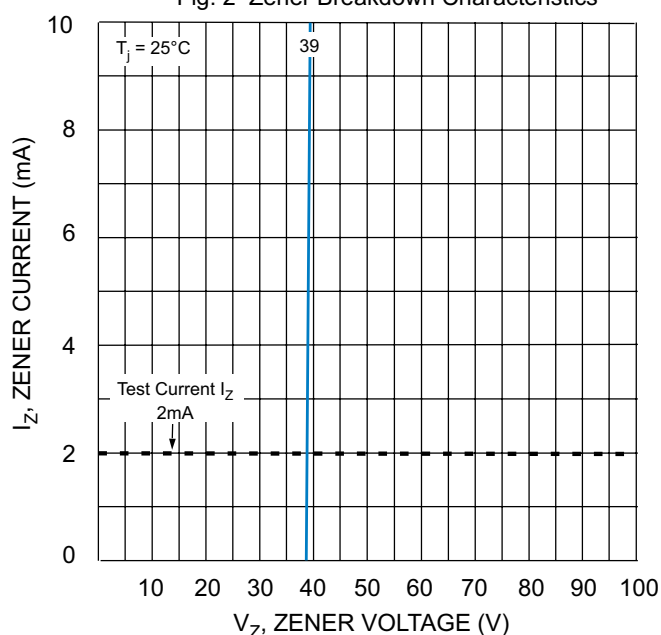


Fig. 4 Zener Breakdown Characteristics

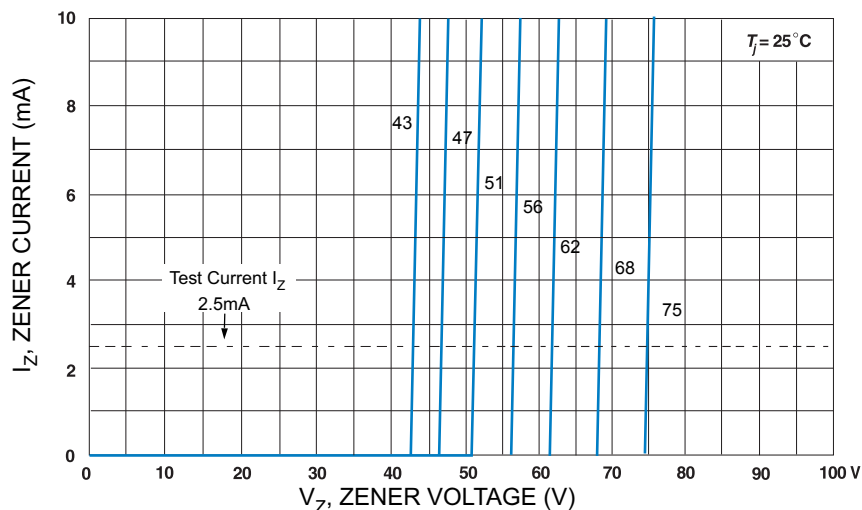
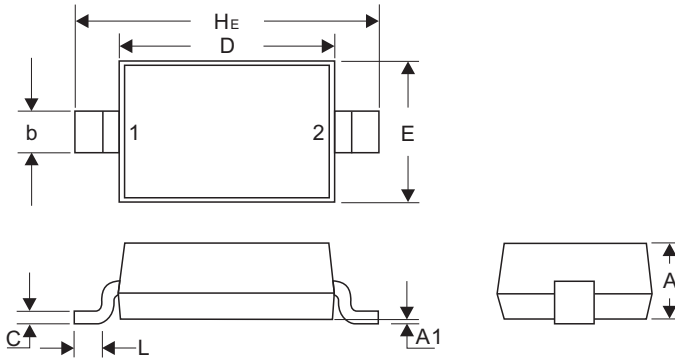
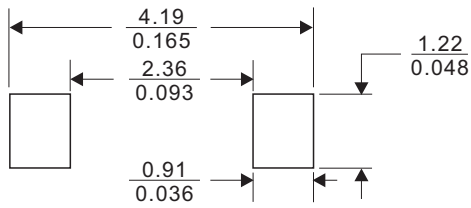


Fig. 5 Zener Breakdown Characteristics

Dimensions(SOD-123)



Recommended Mounting Pad Layout



Dimensions in ($\frac{\text{millimeters}}{\text{inches}}$)

DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.90	1.35	0.037	0.053
A1	0.00	0.10	0.000	0.004
b	0.50	0.70	0.020	0.028
C	-	0.15	-	0.006
D	2.55	2.85	0.100	0.112
E	1.40	1.80	0.055	0.071
L	0.20	-	0.008	-
HE	3.55	3.85	0.140	0.152