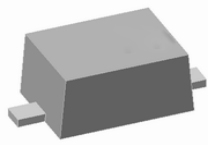


# MM1Z2V4-MM1Z75

Zener Diodes

$V_Z$  : 2.4 to 75 V

$P_D$  : 500 mW



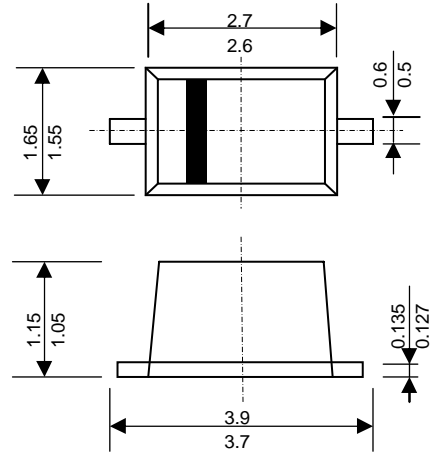
## SOD-123

### Features

- ✧ Total Power Dissipation 500 mW
- ✧ Wide Zener Reverse Voltage Range 2.4 V to 75 V
- ✧ Package Designed for Optimal Automated Board Assembly
- ✧ Small Package Size for High Density Applications
- ✧ Pb / RoHS Free

### Mechanical Data

- ✧ Case : SOD-123
- ✧ Weight : 0.01 gram (approximately)



Dimensions in millimeters

### Maximum Ratings and Thermal Characteristics

Rating at 25 °C ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Total Power Dissipation	$P_{tot}$	500	mW
Maximum Forward Voltage at $I_F = 10$ mA	$V_F$	0.9	V
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3	K/mW
Junction Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 150	°C

**ELECTRICAL CHARACTERISTICS**

TYPE NO.	Marking	Zener Voltage <sup>(2)</sup>			Test Current	Dynamic Impedance <sup>(3)</sup>		Max. Reverse Leakage Current		Temp. Coefficient of Zener Voltage	
		V <sub>Z</sub> @ I <sub>ZT</sub> (V)				I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub>		I <sub>R</sub> @ V <sub>R</sub>		TK <sub>VZ</sub> (%/K)
		Min.	Nom.	Max.	(Ω)		(mA)	(μA)	(V)	Min.	Max.
MM1Z2V4	4C	2.28	2.4	2.56	5	100	5	120	1.0	-0.09	-0.06
MM1Z2V7	4D	2.5	2.7	2.9	5	110	5	120	1.0	-0.09	-0.06
MM1Z3V0	4E	2.8	3.0	3.2	5	120	5	50	1.0	-0.08	-0.05
MM1Z3V3	4F	3.1	3.3	3.5	5	130	5	20	1.0	-0.08	-0.05
MM1Z3V6	4H	3.4	3.6	3.8	5	130	5	10	1.0	-0.08	-0.05
MM1Z3V9	4J	3.7	3.9	4.1	5	130	5	5	1.0	-0.08	-0.05
MM1Z4V3	4K	4.0	4.3	4.6	5	130	5	5	1.0	-0.06	-0.03
MM1Z4V7	4M	4.4	4.7	5.0	5	130	5	2	1.0	-0.05	+0.02
MM1Z5V1	4N	4.8	5.1	5.4	5	130	5	2	1.5	-0.02	+0.02
MM1Z5V6	4P	5.2	5.6	6.0	5	80	5	1	2.5	-0.05	+0.05
MM1Z6V2	4R	5.8	6.2	6.6	5	50	5	1	3.0	0.03	0.06
MM1Z6V8	4X	6.4	6.8	7.2	5	30	5	0.5	3.5	0.03	0.07
MM1Z7V5	4Y	7.0	7.5	7.9	5	30	5	0.5	4.0	0.03	0.07
MM1Z8V2	4Z	7.7	8.2	8.7	5	30	5	0.5	5.0	0.03	0.08
MM1Z9V1	5A	8.5	9.1	9.6	5	30	5	0.5	6.0	0.03	0.09
MM1Z10	5B	9.4	10	10.6	5	30	5	0.1	7.0	0.03	0.1
MM1Z11	5C	10.4	11	11.6	5	30	5	0.1	8.0	0.03	0.11
MM1Z12	5D	11.4	12	12.7	5	35	5	0.1	9.0	0.03	0.11
MM1Z13	5E	12.4	13	14.1	5	35	5	0.1	10	0.03	0.11
MM1Z15	5F	13.8	15	15.6	5	40	5	0.1	11	0.03	0.11
MM1Z16	5H	15.3	16	17.1	5	40	5	0.1	12	0.03	0.11
MM1Z18	5J	16.8	18	19.1	5	45	5	0.1	13	0.03	0.11
MM1Z20	5K	18.8	20	21.2	5	50	5	0.1	15	0.03	0.11
MM1Z22	5M	20.8	22	23.3	5	55	5	0.1	17	0.04	0.12
MM1Z24	5N	22.8	24	25.6	5	60	5	0.1	19	0.04	0.12
MM1Z27	5P	25.1	27	28.9	5	70	2	0.1	21	0.04	0.12
MM1Z30	5R	28.0	30	32.0	5	80	2	0.1	23	0.04	0.12
MM1Z33	5X	31.0	33	35.0	5	80	2	0.1	25	0.04	0.12
MM1Z36	5Y	34.0	36	38.0	5	90	2	0.1	27	0.04	0.12
MM1Z39	5Z	37.0	39	41.0	2.5	100	2	2	30	0.04	0.12
MM1Z43	6A	40.0	43	46.0	2.5	130	2	2	33	0.04	0.12
MM1Z47	6B	44.0	47	50.0	2.5	150	2	2	36	0.04	0.12
MM1Z51	6C	48.0	51	54.0	2.5	180	2	1	39	0.04	0.12
MM1Z56	6D	52.0	56	60.0	2.5	180	2	1	43	0.04	0.12
MM1Z62	6E	58.0	62	66.0	2.5	200	2	0.2	47	0.04	0.12
MM1Z68	6F	64.0	68	72.0	2.5	250	2	0.2	52	0.04	0.12
MM1Z75	6H	70.0	75	79.0	2.5	300	2	0.2	57	0.04	0.12

**Notes :**

- (1) The type number shown have a standard tolerance of ±5% on the nominal Zener Voltage.
- (2) V<sub>Z</sub> is tested with pulses (20ms).
- (3) V<sub>Z</sub> is measured at I<sub>Z</sub> by given a very small A.C. current signal.