

200mW SOD-323 Plastic-Encapsulate Zener Diode

1. Features

- Low zener impedance
- Power dissipation of 200mW
- High stability and high reliability

2. Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

3. Marking and Circuit

Marking	Circuit
	

4. Specification

Absolute Maximum Rating & Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameters	Symbol	Value	Unit
Forward voltage @ $I_F=10mA$	V_F	0.9 ²⁾	V
Power dissipation	P_D	200 ¹⁾	mW
Storage temperature range	T_S	-65~150	°C

1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²

2) Short duration test pulse used to minimize self-heating effect

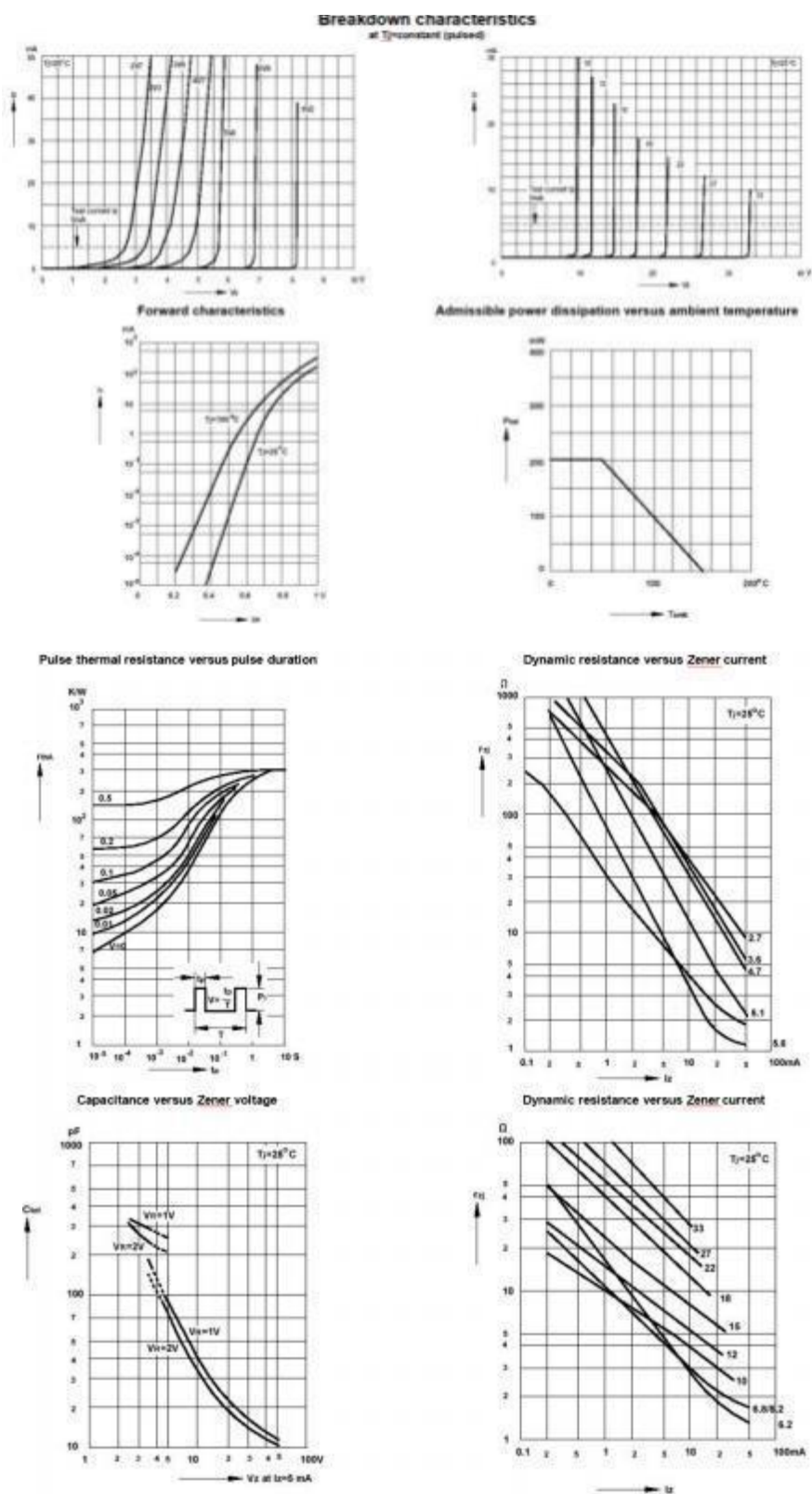
3) $f=1KHz$

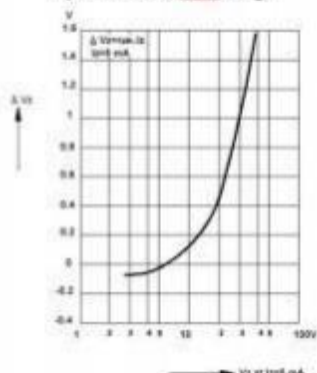
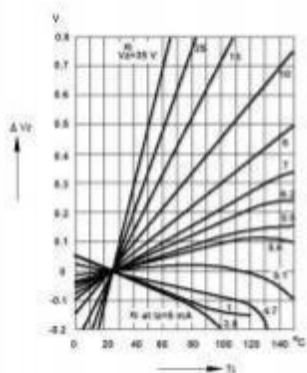
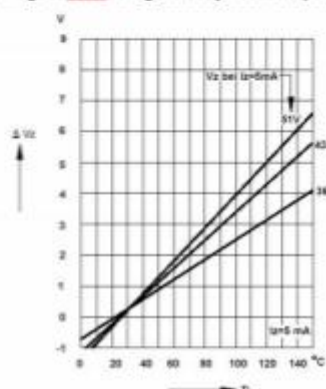
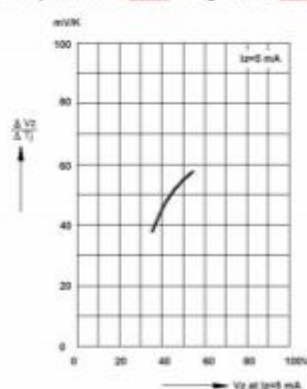
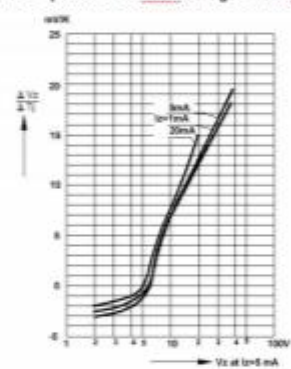
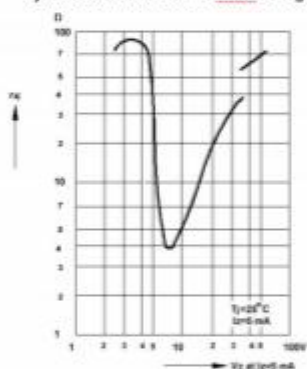
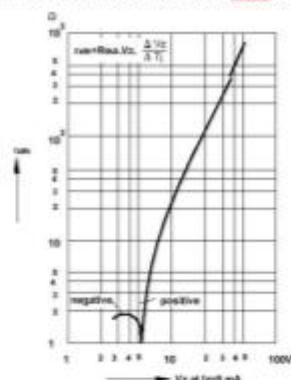
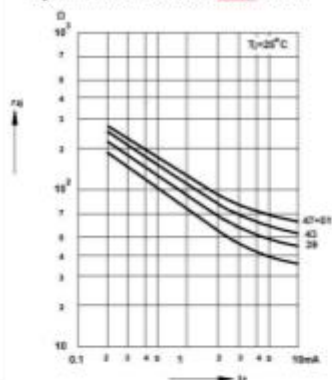
Electrical Characteristics (At $T_A = 25^{\circ}C$ unless otherwise specified)

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		C @VR=0 f=1MHz
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V	Min	Max	pF
MM3Z2V0BW	WY	2	1.91	2.09	5	100	600	1	150	1	-3.5	0	450

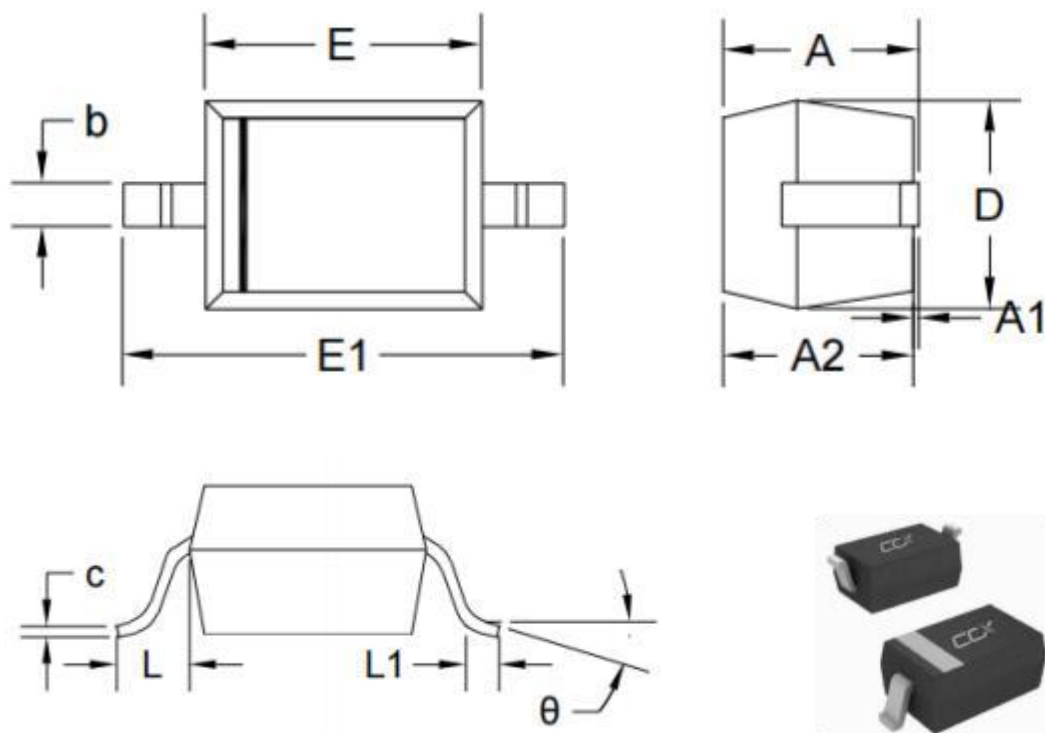
MM3Z2V4BW	00	2.4	2.2	2.6	5	100	1000	0.5	50	1	-3.5	0	450
MM3Z2V7BW	01	2.7	2.5	2.9	5	100	1000	0.5	20	1	-3.5	0	450
MM3Z3V0BW	02	3	2.8	3.2	5	100	1000	0.5	10	1	-3.5	0	450
MM3Z3V3BW	05	3.3	3.1	3.5	5	95	1000	0.5	5	1	-3.5	0	450
MM3Z3V6BW	06	3.6	3.4	3.8	5	90	1000	0.5	5	1	-3.5	0	450
MM3Z3V9BW	07	3.9	3.7	4.1	5	90	1000	0.5	3	1	-3.5	-2.5	450
MM3Z4V3BW	08	4.3	4	4.6	5	90	1000	0.5	3	1	-3.5	0	450
MM3Z4V7BW	09	4.7	4.4	5	5	80	800	0.5	3	2	-3.5	0.2	260
MM3Z5V1BW	0A	5.1	4.8	5.4	5	60	800	0.5	2	2	-2.7	1.2	225
MM3Z5V6BW	0C	5.6	5.2	6	5	40	700	0.5	1	2	-2	2.5	200
MM3Z6V2BW	0E	6.2	5.8	6.6	5	10	100	0.5	3	4	0.4	3.7	185
MM3Z6V8BW	0F	6.8	6.4	7.2	5	15	160	0.5	2	4	1.2	4.5	155
MM3Z7V5BW	0G	7.5	7	7.9	5	15	160	0.5	1	5	2.5	5.3	140
MM3Z8V2BW	0H	8.2	7.7	8.7	5	15	160	0.5	0.7	5	3.2	6.2	135
MM3Z9V1BW	0K	9.1	8.5	9.6	5	15	160	0.5	0.2	7	3.8	7	130
MM3Z10BW	0L	10	9.4	10.6	5	20	160	0.5	0.1	8	4.5	8	130
MM3Z11BW	0M	11	10.4	11.6	5	20	160	0.5	0.1	8	5.4	9	130
MM3Z12BW	0N	12	11.4	12.7	5	25	80	0.5	0.1	8	6	10	130
MM3Z13BW	0P	13	12.4	14.1	5	30	80	0.5	0.1	8	7	11	120
MM3Z15BW	0T	15	13.8	15.6	5	30	400	0.5	0.05	10.5	9.2	13	110
MM3Z16BW	0U	16	15.3	17.1	5	40	400	0.5	0.05	11.2	10.4	14	105
MM3Z18BW	0W	18	16.8	19.1	5	45	400	0.5	0.05	12.6	12.4	16	100
MM3Z20BW	0Z	20	18.8	21.2	5	55	500	0.5	0.05	14	14.4	18	85
MM3Z22BW	10	22	20.8	23.3	5	55	500	0.5	0.05	15.4	16.4	20	85
MM3Z24BW	11	24	22.8	25.6	5	70	120	0.5	0.05	16.8	18.4	22	80
MM3Z27BW	12	27	25.1	28.9	2	80	300	0.5	0.05	18.9	21.4	25.3	70
MM3Z30BW	14	30	28	32	2	80	300	0.5	0.05	21	24.4	29.4	70
MM3Z33BW	18	33	31	35	2	80	300	0.5	0.05	23.1	27.4	33.4	70
MM3Z36BW	19	36	34	38	2	90	500	0.5	0.05	25.2	30.4	37.4	70
MM3Z39BW	20	39	37	41	2	130	500	0.5	0.05	27.3	33.4	41.2	45
MM3Z43BW	21	43	40	46	2	150	500	0.5	0.05	30.1	37.6	46.6	40
MM3Z47BW	1A	47	44	50	2	170	500	0.5	0.05	32.9	42	51.8	40
MM3Z51BW	1C	51	48	54	2	180	500	0.5	0.05	35.7	46.6	57.2	40
MM3Z56BW	1D	56	52	60	2	200	500	0.5	0.05	39.2	52.2	63.8	40
MM3Z62BW	1E	62	58	66	2	215	500	0.5	0.05	43.3	58.8	71.6	35
MM3Z68BW	1F	68	64	72	2	240	500	0.5	0.05	47.6	65.6	79.8	35
MM3Z75BW	1G	75	70	79	2	255	500	0.5	0.05	52.5	73.4	88.6	35

5. Typical Characteristic



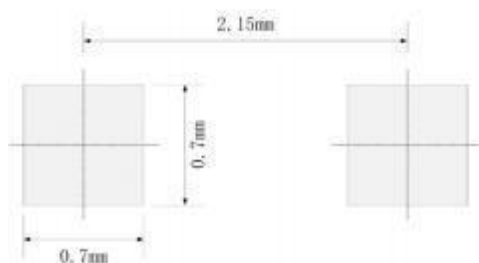


6. Dimension and Patterns (SOD-323)



Units: mm

Symbol	Min.	Max.	Symbol	Min.	Max.
A		1.000	E	1.600	1.800
A1	0.000	0.100	E1	2.550	2.750
A2	0.800	0.900	L	0.475REF	
b	0.250	0.350	L1	0.250	0.400
c	0.080	0.150	θ	0 °	8 °
D	1.200	1.400			



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference only
4. Unit: mm

Notice

1. All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. The right to explain is owned by CCX electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification.

Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. CCX shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.