

200mW SOD-323 Plastic-Encapsulate Zener Diode

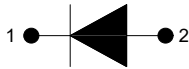
1. Features

- 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 @ $I_F=10\text{mA}$ (Note2)	V_F	0.9	V
Power dissipation (Note1)	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction Temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55~150	°C

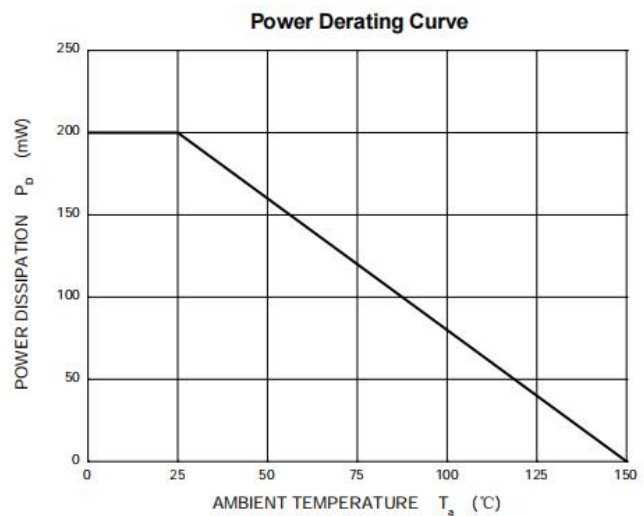
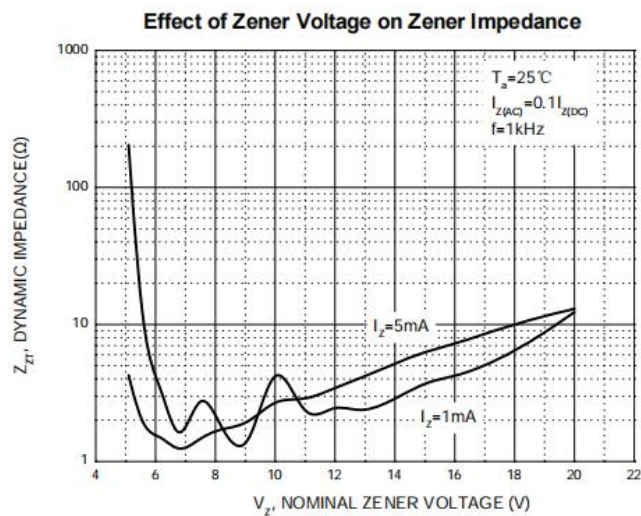
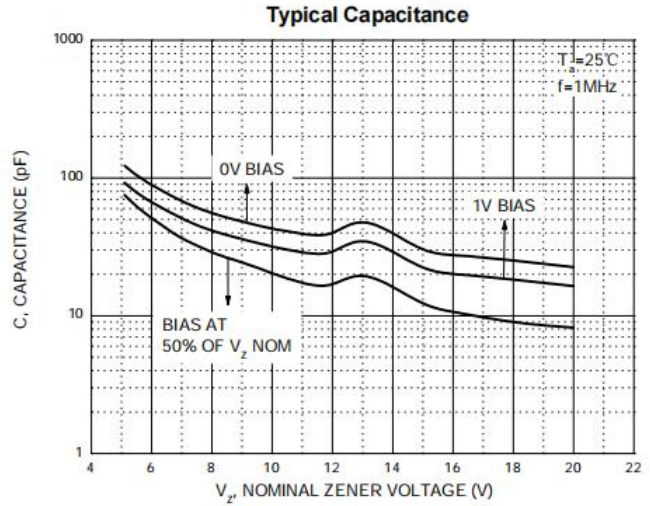
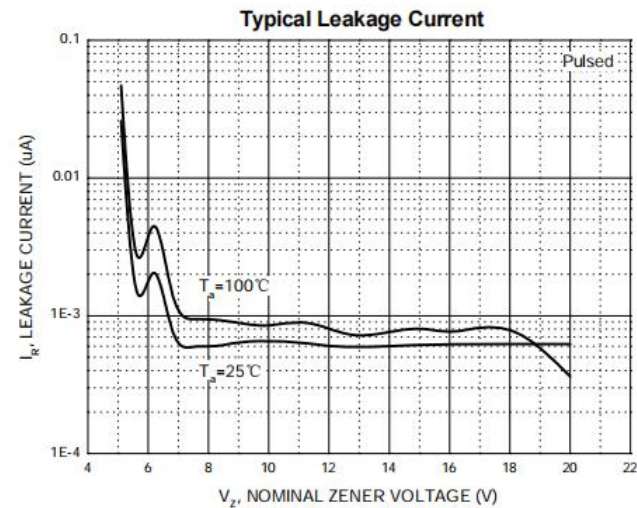
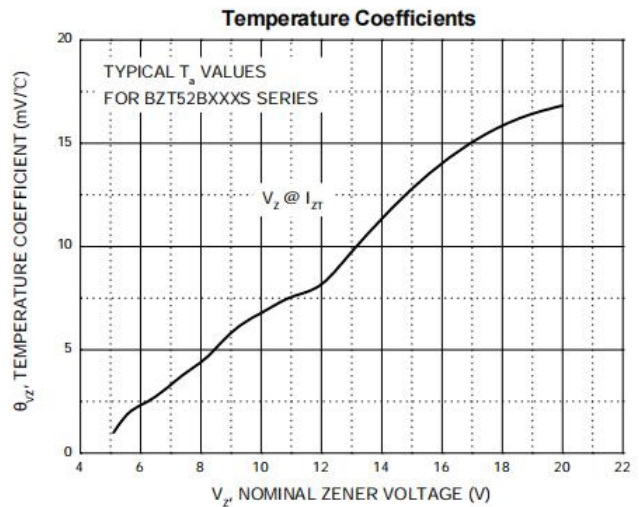
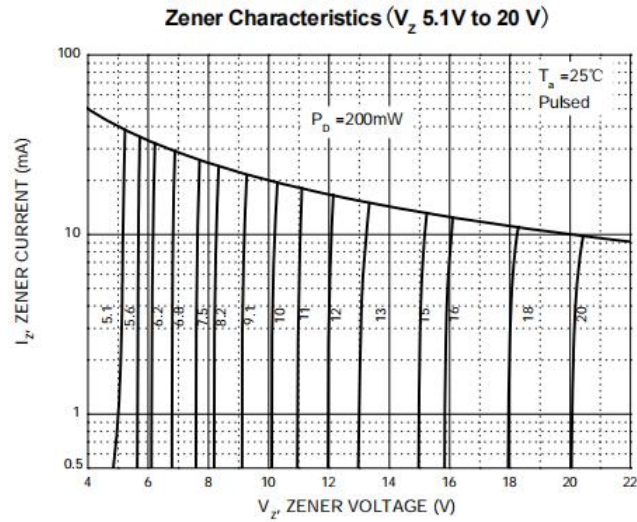
Notes:

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.

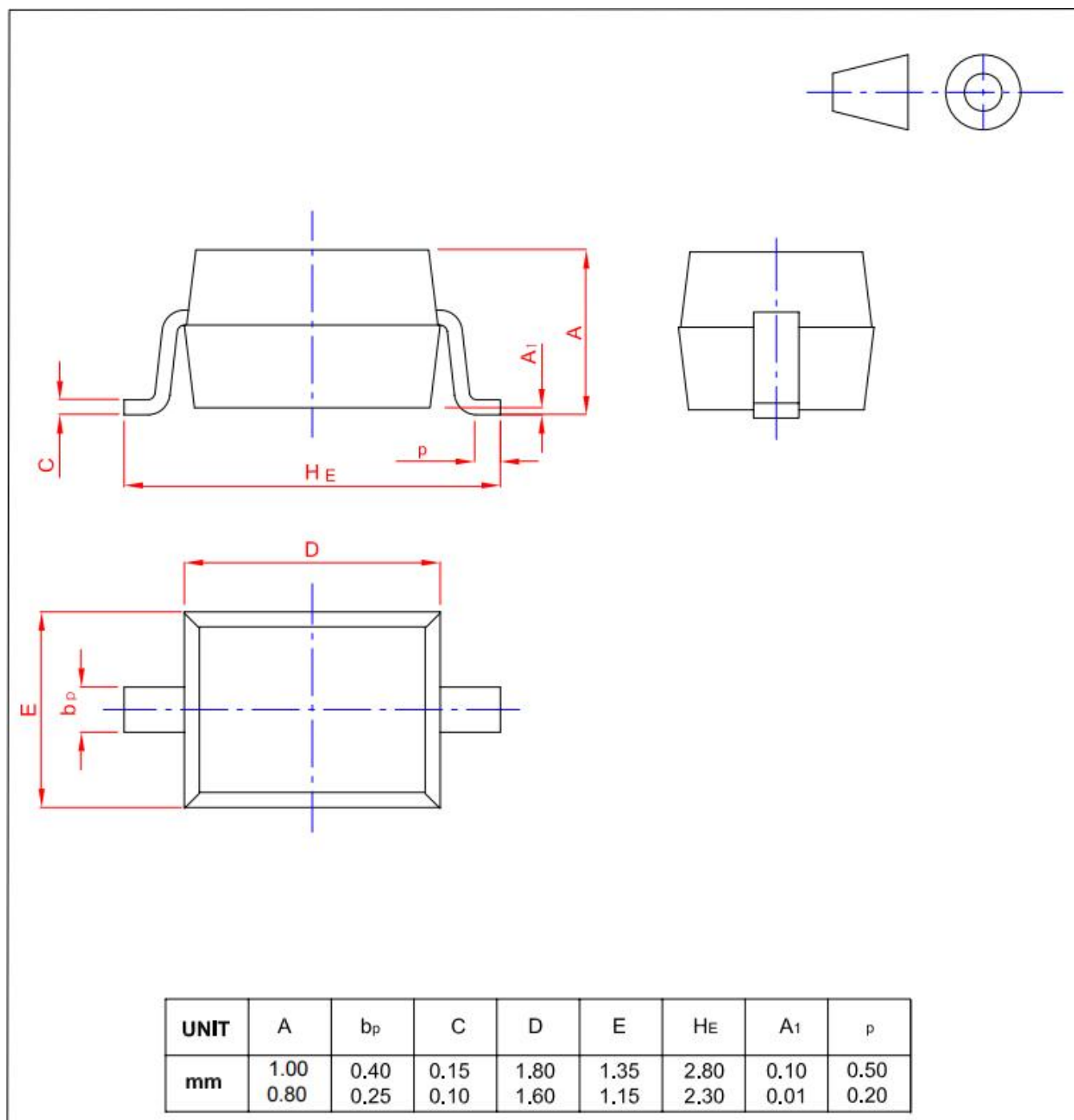
Electrical Characteristics (At TA = 25°C unless otherwise specified)

Device	Marking	Zener Voltage Range				Maximum Zener Impedance (Note3)			Maximum Reverse Current		Typical Temperature coefficient @IZTC=mV/°C		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V			mA
BZT52B2V4S	2WX	2.4	2.35	2.45	5	100	600	1.0	50.0	1.0	-3.5	0.0	5
BZT52B2V7S	2W1	2.7	2.65	2.75	5	100	600	1.0	20.0	1.0	-3.5	0.0	5
BZT52B3V0S	2W2	3.0	2.94	3.06	5	95	600	1.0	10.0	1.0	-3.5	0.0	5
BZT52B3V3S	2W3	3.3	3.23	3.37	5	95	600	1.0	5.0	1.0	-3.5	0.0	5
BZT52B3V6S	2W4	3.6	3.53	3.67	5	90	600	1.0	5.0	1.0	-3.5	0.0	5
BZT52B3V9S	2W5	3.9	3.82	3.98	5	90	600	1.0	3.0	1.0	-3.5	0.0	5
BZT52B4V3S	2W6	4.3	4.21	4.39	5	90	600	1.0	3.0	1.0	-3.5	0.0	5
BZT52B4V7S	2W7	4.7	4.61	4.79	5	80	500	1.0	3.0	2.0	-3.5	0.2	5
BZT52B5V1S	2W8	5.1	5.00	5.20	5	60	480	1.0	2.0	2.0	-2.7	1.2	5
BZT52B5V6S	2W9	5.6	5.49	5.71	5	40	400	1.0	1.0	2.0	-2.0	2.5	5
BZT52B6V2S	2WA	6.2	6.08	6.32	5	10	150	1.0	3.0	4.0	0.4	3.7	5
BZT52B6V8S	2WB	6.8	6.66	6.94	5	15	80	1.0	2.0	4.0	1.2	4.5	5
BZT52B7V5S	2WC	7.5	7.35	7.65	5	15	80	1.0	1.0	5.0	2.5	5.3	5
BZT52B8V2S	2WD	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0	3.2	6.2	5
BZT52B9V1S	2WE	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0	3.8	7.0	5
BZT52B10S	2WF	10.0	9.80	10.20	5	20	150	1.0	0.2	7.0	4.5	8.0	5
BZT52B11S	2WG	11.0	10.78	11.22	5	20	150	1.0	0.1	8.0	5.4	9.0	5
BZT52B12S	2WH	12.0	11.76	12.24	5	25	150	1.0	0.1	8.0	6.0	10.0	5
BZT52B13S	2WI	13.0	12.74	13.26	5	30	170	1.0	0.1	8.0	7.0	11.0	5
BZT52B15S	2WJ	15.0	14.70	15.30	5	30	200	1.0	0.1	10.5	9.2	13.0	5
BZT52B16S	2WK	16.0	15.68	16.32	5	40	200	1.0	0.1	11.2	10.4	14.0	5
BZT52B18S	2WL	18.0	17.64	18.36	5	45	225	1.0	0.1	12.6	12.4	16.0	5
BZT52B20S	2WM	20.0	19.60	20.40	5	55	225	1.0	0.1	14.0	14.4	18.0	5
BZT52B22S	2WN	22.0	21.56	22.44	5	55	250	1.0	0.1	15.4	16.4	20.0	5
BZT52B24S	2WO	24.0	23.52	24.48	5	70	250	1.0	0.1	16.8	18.4	22.0	5
BZT52B27S	2WP	27.0	26.46	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3	2
BZT52B30S	2WQ	30.0	29.40	30.60	2	80	300	0.5	0.1	21.0	24.4	29.4	2
BZT52B33S	2WR	33.0	32.34	33.66	2	80	325	0.5	0.1	23.1	27.4	33.4	2
BZT52B36S	2WS	36.0	35.28	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4	2
BZT52B39S	2WT	39.0	38.22	39.78	2	130	350	0.5	0.1	27.3	33.4	41.2	2

5. Typical Characteristic



6. Dimension and Patterns (SOD-323)



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.