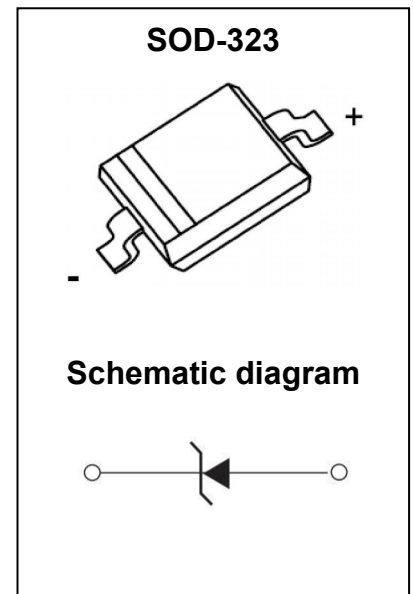


BZT52C Series ZENER DIODE

Feature

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes
- Available in Lead Free Version



ABSOLUTE MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Forward Voltage (Note 2) @ I _F = 10mA	V _F	0.9	V
Power Dissipation (Note1)	P _D	0.2	W
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _J	-65 ~ +150	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

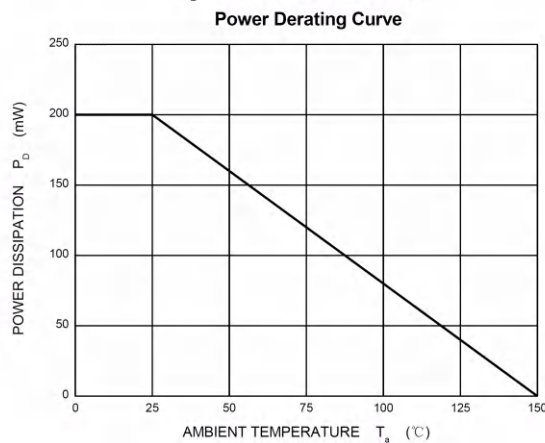
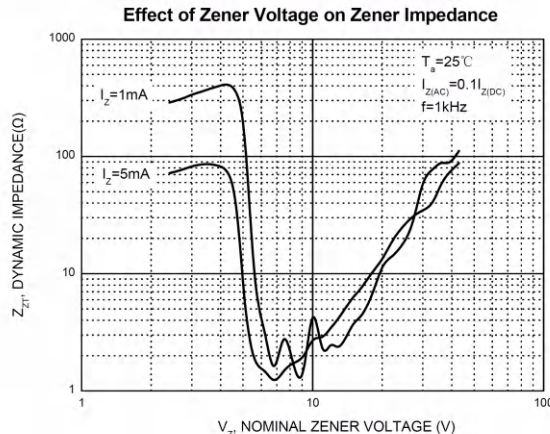
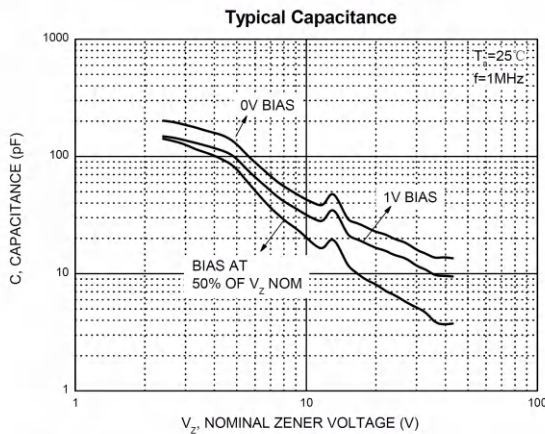
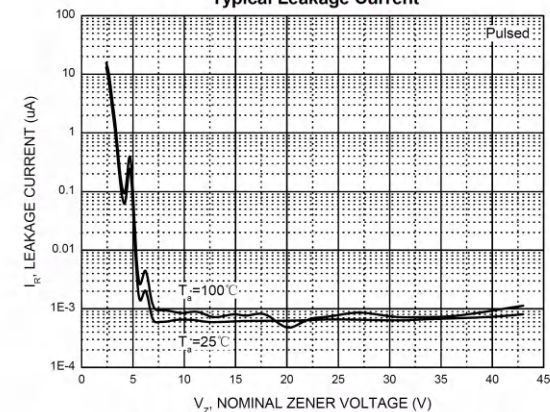
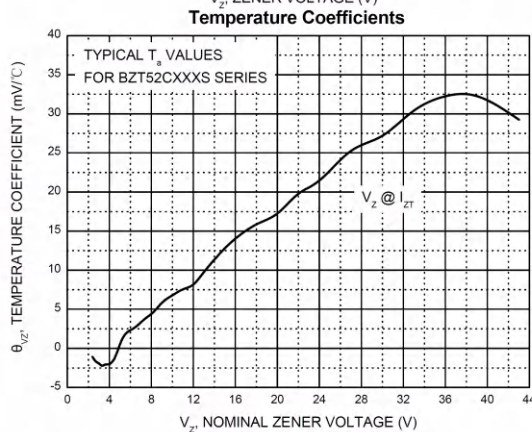
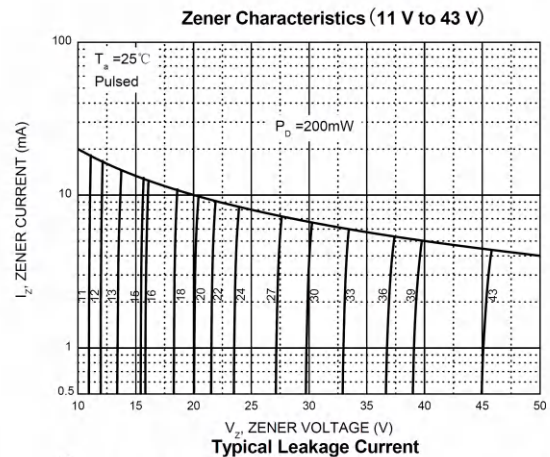
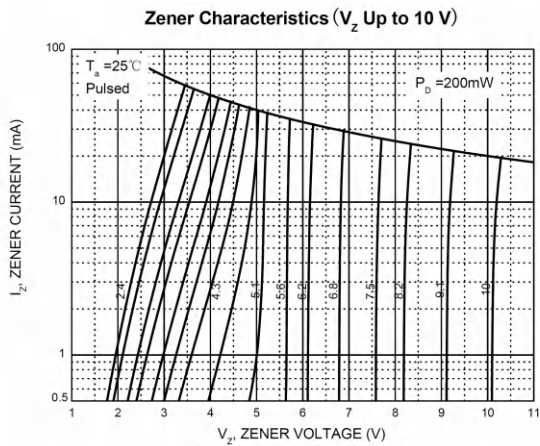
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Type Number	Type Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current	
		Vz@IzT			IzT	ZzT@IzT	Zzk@Izk	Izk	Ir	Vr
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V
BZT52C2V4S	HWX/WX	2.4	2.28	2.52	5	100	600	1.0	50	1.0
BZT52C2V7S	HW1/W1	2.7	2.57	2.84	5	100	600	1.0	20	1.0
BZT52C3V0S	HW2/W2	3.0	2.85	3.15	5	95	600	1.0	10	1.0
BZT52C3V3S	HW3/W3	3.3	3.14	3.47	5	95	600	1.0	5	1.0
BZT52C3V6S	HW4/W4	3.6	3.42	3.78	5	90	600	1.0	5	1.0
BZT52C3V9S	HW5/W5	3.9	3.71	4.10	5	90	600	1.0	3	1.0
BZT52C4V3S	HW6/W6	4.3	4.09	4.52	5	90	600	1.0	3	1.0
BZT52C4V7S	HW7/W7	4.7	4.47	4.94	5	80	500	1.0	3	2.0
BZT52C5V1S	HW8/W8	5.1	4.85	5.36	5	60	480	1.0	2	2.0
BZT52C5V6S	HW9/W9	5.6	5.32	5.88	5	40	400	1.0	1	2.0
BZT52C6V2S	HWA/WA	6.2	5.89	6.51	5	10	150	1.0	3	4.0
BZT52C6V8S	HWB/WB	6.8	6.46	7.14	5	15	80	1.0	2	4.0
BZT52C7V5S	HWC/WC	7.5	7.13	7.88	5	15	80	1.0	1	5.0
BZT52C8V2S	HWD/WD	8.2	7.79	8.61	5	15	80	1.0	0.7	5.0
BZT52C9V1S	HWE/WE	9.1	8.65	9.56	5	15	100	1.0	0.5	6.0
BZT52C10S	HWF/WF	10	9.5	10.50	5	20	150	1.0	0.2	7.0
BZT52C11S	HWG/WG	11	10.45	11.55	5	20	150	1.0	0.1	8.0
BZT52C12S	HWH/WH	12	11.40	12.60	5	25	150	1.0	0.1	8.0
BZT52C13S	HWI/WI	13	12.35	13.65	5	30	170	1.0	0.1	8.0
BZT52C15S	HWJ/WJ	15	14.25	15.75	5	30	200	1.0	0.1	10.5
BZT52C16S	HWK/WK	16	15.20	16.80	5	40	200	1.0	0.1	11.2
BZT52C18S	HWL/WL	18	17.10	18.90	5	45	225	1.0	0.1	12.6
BZT52C20S	HWM/MM	20	19.00	21.00	5	55	225	1.0	0.1	14.0
BZT52C22S	HWN/WN	22	20.90	23.10	5	55	250	1.0	0.1	15.4
BZT52C24S	HWO/WO	24	22.80	25.20	5	70	250	1.0	0.1	16.8
BZT52C27S	HWP/WP	27	25.65	28.35	2	80	300	0.5	0.1	18.9
BZT52C30S	HWQ/WQ	30	28.50	31.50	2	80	300	0.5	0.1	21.0
BZT52C33S	HWR/WR	33	31.35	34.65	2	80	325	0.5	0.1	23.1
BZT52C36S	HWS/WS	36	34.20	37.80	2	90	350	0.5	0.1	25.2
BZT52C39S	HWT/WT	39	37.05	40.95	2	130	350	0.5	0.1	27.3

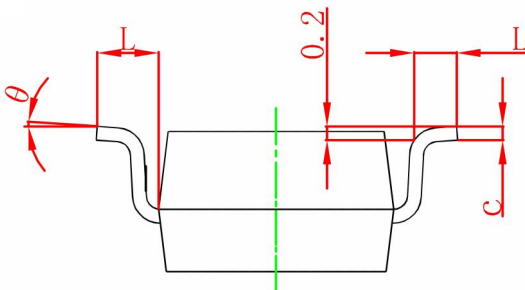
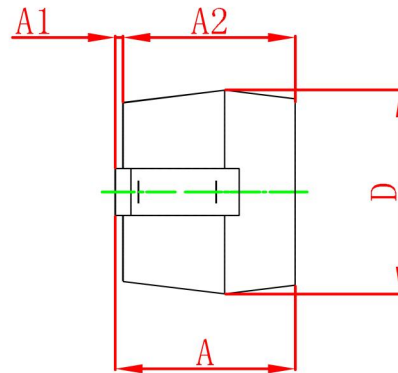
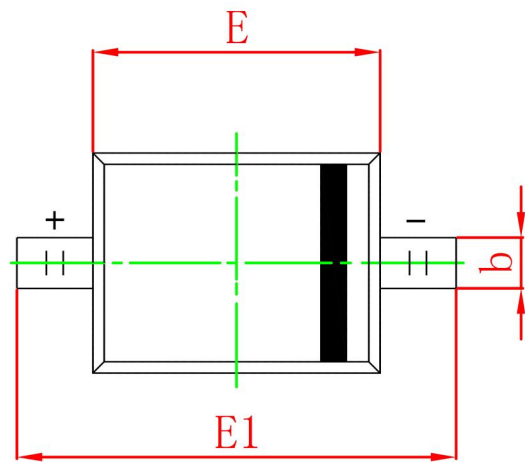
Notes:

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.

Typical Characteristics



SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475REF.		0.019REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°