

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

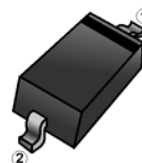
FEATURES

- Constant Voltage Control
- Wide Voltage Range Selection 2.4V~75V
- Matte Tin (Sn) Lead Finish

MECHANICAL DATA

- Case: SOD-323, Molded Plastic
- Mounting Position: Any
- Polarity: As Marked

SOD-323



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

ORDER INFORMATION

Part Number	Type
BZT52BxxxS-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~150	

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Type Number	Marking	Zener Voltage Range ¹				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	V _R
		Min.	Nom.	Max.						
		V			mA	Ω		mA	μA	V
BZT52B2V4S-C	2WX / 0Z	2.35	2.4	2.45	5	100	600	1	50	1
BZT52B2V7S-C	2W1 / 1Z	2.65	2.7	2.75	5	100	600	1	20	1
BZT52B3V0S-C	2W2 / 2Z	2.94	3	3.06	5	95	600	1	10	1
BZT52B3V3S-C	2W3 / 3Z	3.23	3.3	3.37	5	95	600	1	5	1
BZT52B3V6S-C	2W4 / 4Z	3.53	3.6	3.67	5	90	600	1	5	1
BZT52B3V9S-C	2W5 / 5Z	3.82	3.9	3.98	5	90	600	1	3	1
BZT52B4V3S-C	2W6 / 6Z	4.21	4.3	4.39	5	90	600	1	3	1
BZT52B4V7S-C	2W7 / 7Z	4.61	4.7	4.79	5	80	500	1	3	2
BZT52B5V1S-C	2W8 / 8Z	5	5.1	5.2	5	60	480	1	2	2
BZT52B5V6S-C	2W9 / 9Z	5.49	5.6	5.71	5	40	400	1	1	2

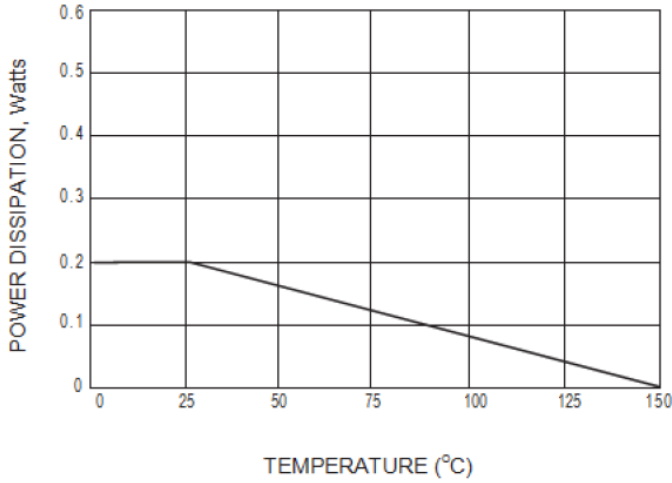
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Type Number	Marking	Zener Voltage Range ¹				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	V _R
		Min.	Nom.	Max.						
		V			mA	Ω		mA	μA	V
BZT52B6V2S-C	2WA / AZ	6.08	6.2	6.32	5	10	150	1	3	4
BZT52B6V8S-C	2WB / BZ	6.66	6.8	6.94	5	15	80	1	2	4
BZT52B7V5S-C	2WC / CZ	7.35	7.5	7.65	5	15	80	1	1	5
BZT52B8V2S-C	2WD / DZ	8.04	8.2	8.36	5	15	80	1	0.7	5
BZT52B9V1S-C	2WE / EZ	8.92	9.1	9.28	5	15	100	1	0.5	6
BZT52B10S-C	2WF / FZ	9.8	10	10.2	5	20	150	1	0.2	7
BZT52B11S-C	2WG / GZ	10.78	11	11.22	5	20	150	1	0.1	8
BZT52B12S-C	2WH / HZ	11.76	12	12.24	5	25	150	1	0.1	8
BZT52B13S-C	2WI / JZ	12.74	13	13.26	5	30	170	1	0.1	8
BZT52B14S-C	2WY	13.72	14	14.28	5	25	110	1	0.1	10.5
BZT52B15S-C	2WJ / KZ	14.7	15	15.3	5	30	200	1	0.1	10.5
BZT52B16S-C	2WK / LZ	15.68	16	16.32	5	40	200	1	0.1	11.2
BZT52B18S-C	2WL / MZ	17.64	18	18.36	5	45	225	1	0.1	12.6
BZT52B20S-C	2WM / NZ	19.6	20	20.4	5	55	225	1	0.1	14
BZT52B22S-C	2WN / PZ	21.56	22	22.44	5	55	250	1	0.1	15.4
BZT52B24S-C	2WO / RZ	23.52	24	24.48	5	70	250	1	0.1	16.8
BZT52B27S-C	2WP / SZ	26.46	27	27.54	2	80	300	0.5	0.1	18.9
BZT52B30S-C	2WQ / TZ	29.4	30	30.6	2	80	300	0.5	0.1	21
BZT52B33S-C	2WR / UZ	32.34	33	33.66	2	80	325	0.5	0.1	23.1
BZT52B36S-C	2WS / VZ	35.28	36	36.72	2	90	350	0.5	0.1	25.2
BZT52B39S-C	2WT / WZ	38.22	39	39.78	2	130	350	0.5	0.1	27.3
BZT52B43S-C	2WU / XZ	42.14	43	43.86	2	130	350	0.5	0.1	29.4
BZT52B47S-C	2WV / YZ	45.83	47	48.17	2	170	1000	0.25	0.1	36
BZT52B51S-C	2X1 / ZZ	49.73	51	52.27	2	180	1300	0.25	0.1	39
BZT52B56S-C	2X2 / X2	54.6	56	57.4	2	200	1400	0.25	0.1	43
BZT52B62S-C	2X3 / X3	60.45	62	63.55	2	225	1400	0.25	0.1	47
BZT52B68S-C	2X4 / X4	66.3	68	69.7	2	240	1600	0.25	0.1	52
BZT52B75S-C	2X5 / X5	73.13	75	76.87	2	265	1700	0.25	0.1	56

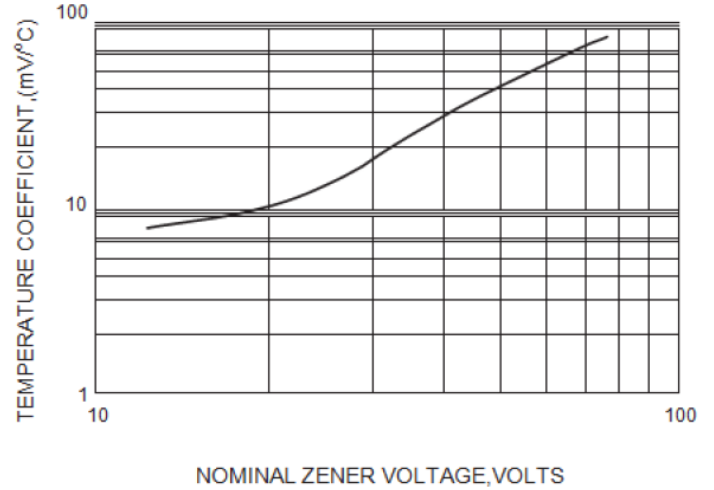
Note:
1. Pulse width=10ms.

TYPICAL CHARACTERISTICS

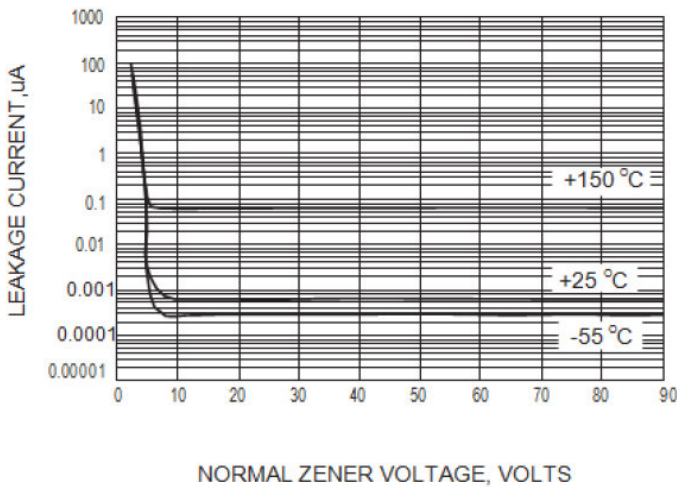
Steady State Power Derating



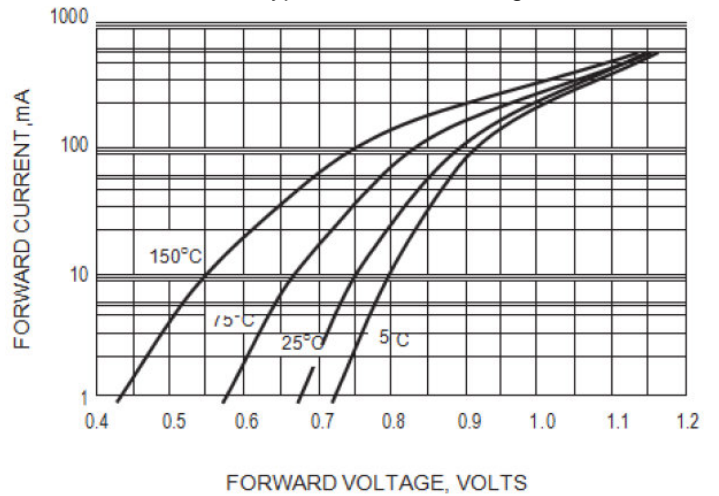
Temperature Coefficients



Typical Leakage Current

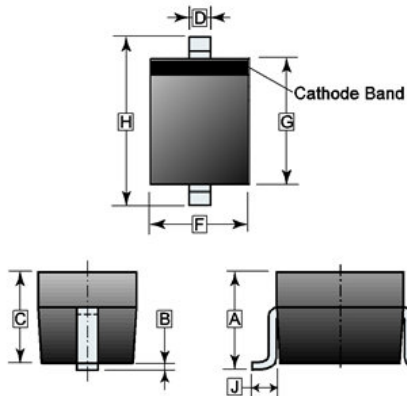


Typical Forward Voltage



PACKAGE OUTLINE DIMENSIONS

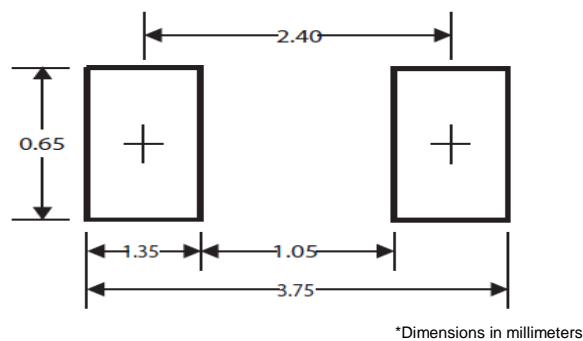
SOD-323



REF.	Millimeter	
	Min.	Max.
A	1.05 REF.	
B	0.07 REF.	
C	0.80	1.10
D	0.25	0.40
E	0.05	0.25
F	1.10	1.50
G	1.50	1.95
H	2.30	2.80
J	0.475 REF.	

MOUNTING PAD LAYOUT

SOD-323



*Dimensions in millimeters