

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

SOD-323



## MECHANICAL DATA

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

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

## ORDER INFORMATION

Part Number	Type
BZT52CxxxS-C	Lead (Pb)-free and Halogen-free



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Power Dissipation	P <sub>D</sub>	200	mW
Maximum Forward Voltage @ I <sub>F</sub> =10mA	V <sub>F</sub>	900	mV
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55~150	

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

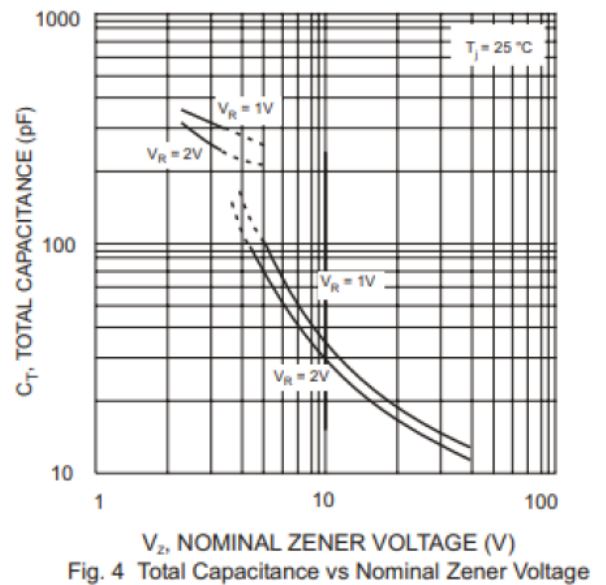
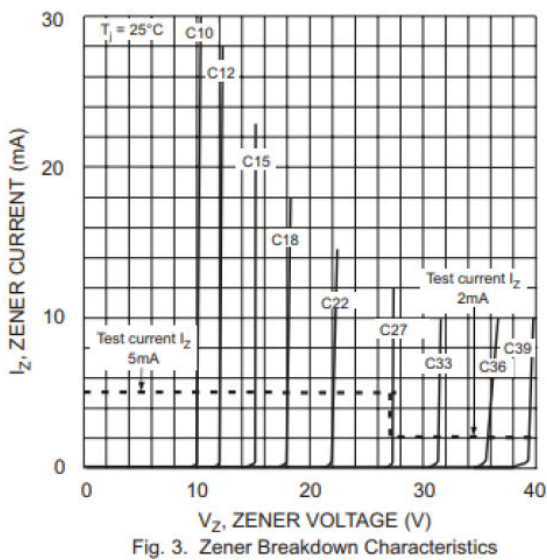
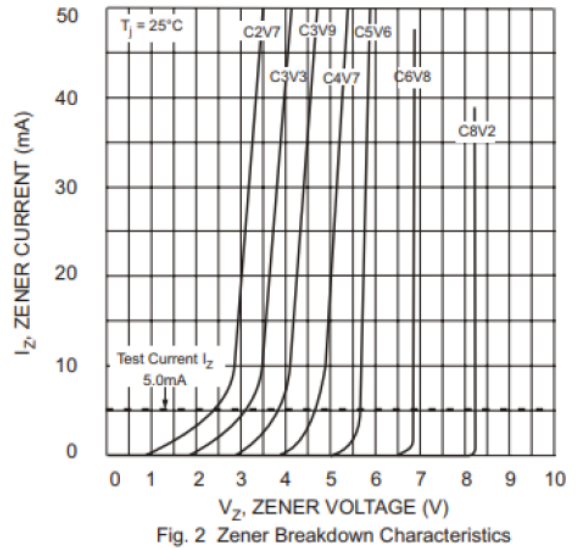
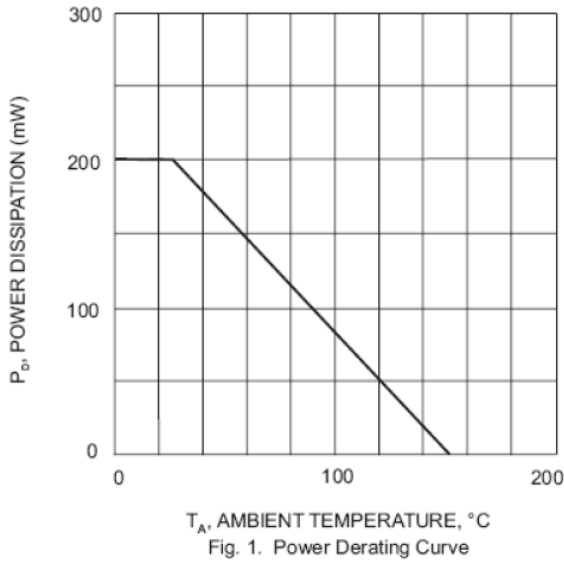
Type Number	Marking	Zener Voltage Range <sup>1</sup>				Maximum Zener Impedance			Maximum Reverse Current	
		V <sub>Z</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>
		Min.	Nom.	Max.						
		V			mA	Ω	mA	μA	V	
BZT52C2V4S-C	WX	2.28	2.4	2.52	5	100	600	1	50	1
BZT52C2V7S-C	W1	2.57	2.7	2.84	5	100	600	1	20	1
BZT52C3V0S-C	W2	2.85	3	3.15	5	95	600	1	10	1
BZT52C3V3S-C	W3	3.14	3.3	3.47	5	95	600	1	5	1
BZT52C3V6S-C	W4	3.42	3.6	3.78	5	90	600	1	5	1
BZT52C3V9S-C	W5	3.71	3.9	4.1	5	90	600	1	3	1
BZT52C4V3S-C	W6	4.09	4.3	4.52	5	90	600	1	3	1
BZT52C4V7S-C	W7	4.47	4.7	4.94	5	80	500	1	3	2
BZT52C5V1S-C	W8	4.85	5.1	5.36	5	60	480	1	2	2
BZT52C5V6S-C	W9	5.32	5.6	5.88	5	40	400	1	1	2

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

Type Number	Marking	Zener Voltage Range <sup>1</sup>				Maximum Zener Impedance			Maximum Reverse Current	
		V <sub>Z</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>
		Min.	Nom.	Max.						
		V			mA	Ω		mA	μA	V
BZT52C6V2S-C	WA	5.89	6.2	6.51	5	10	150	1	3	4
BZT52C6V8S-C	WB	6.46	6.8	7.14	5	15	80	1	2	4
BZT52C7V5S-C	WC	7.13	7.5	7.88	5	15	80	1	1	5
BZT52C8V2S-C	WD	7.79	8.2	8.61	5	15	80	1	0.7	5
BZT52C9V1S-C	WE	8.65	9.1	9.56	5	15	100	1	0.5	6
BZT52C10S-C	WF	9.5	10	10.5	5	20	150	1	0.2	7
BZT52C11S-C	WG	10.45	11	11.55	5	20	150	1	0.1	8
BZT52C12S-C	WH	11.4	12	12.6	5	25	150	1	0.1	8
BZT52C13S-C	WI	12.35	13	13.65	5	30	170	1	0.1	8
BZT52C15S-C	WJ	14.25	15	15.75	5	30	200	1	0.1	10.5
BZT52C16S-C	WK	15.2	16	16.8	5	40	200	1	0.1	11.2
BZT52C18S-C	WL	17.1	18	18.9	5	45	225	1	0.1	12.6
BZT52C20S-C	WM	19	20	21	5	55	225	1	0.1	14
BZT52C22S-C	WN	20.9	22	23.1	5	55	250	1	0.1	15.4
BZT52C24S-C	WO	22.8	24	25.2	5	70	250	1	0.1	16.8
BZT52C27S-C	WP	25.65	27	28.35	2	80	300	0.5	0.1	18.9
BZT52C30S-C	WQ	28.5	30	31.5	2	80	300	0.5	0.1	21
BZT52C33S-C	WR	31.35	33	34.65	2	80	325	0.5	0.1	23.1
BZT52C36S-C	WS	34.2	36	37.8	2	90	350	0.5	0.1	25.2
BZT52C39S-C	WT	37.05	39	40.95	2	130	350	0.5	0.1	27.3
BZT52C43S-C	WU	40.85	43	45.15	2	130	350	0.5	0.1	29.4
BZT52C47S-C	WV	44.65	47	49.35	2	170	1000	0.25	0.1	36
BZT52C51S-C	X1	48.45	51	53.55	2	180	1300	0.25	0.1	39
BZT52C56S-C	X2	53.2	56	58.8	2	200	1400	0.25	0.1	43
BZT52C62S-C	X3	58.9	62	65.1	2	225	1400	0.25	0.1	47
BZT52C68S-C	X4	64.6	68	71.4	2	240	1600	0.25	0.1	52
BZT52C75S-C	X5	71.25	75	78.75	2	265	1700	0.25	0.1	56

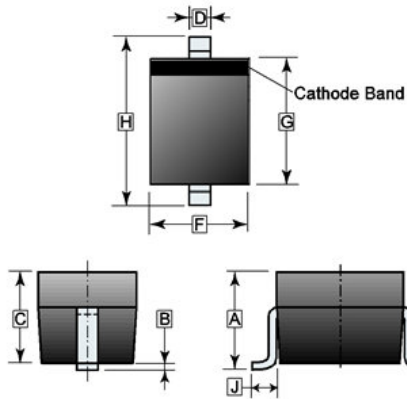
Note:  
1. Pulse width=10ms.

**TYPICAL CHARACTERISTICS**



**PACKAGE OUTLINE DIMENSIONS**

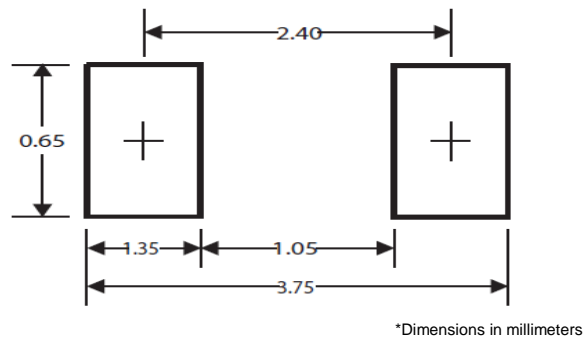
**SOD-323**



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