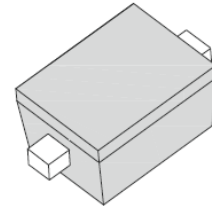


## 200mW Two Terminals SMD Zener Diodes

### Features

- Planar Die Construction
- 200mW Power Dissipation
- Zener Voltage 2.4v to 51v
- Ideally Suited for Automated Assembly Processes
- RoHS Compliance



SOD-323F



### Mechanical Data

<b>Case:</b>	SOD-323F, molded plastic
<b>Epoxy:</b>	Plastic package has UL flammability 94V-0
<b>Terminals:</b>	Solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode
<b>Approx Weight:</b>	0.0041 grams

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	Value	Unit	Conditions
<b>P<sub>tot</sub></b>	Power Dissipation	200	mW	T <sub>A</sub> =25 °C (Note )
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150	°C	

**Note:** Mounted on 5.0mm<sup>2</sup> (0.13mm thick ) land areas

## 200mW Two Terminals SMD Zener Diodes

### BZT52C2V4WS - BZT52C51WS

#### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Part NO.	Marking Code	Nominal Zener Voltage @ I <sub>ZT</sub>			Test Current I <sub>ZT</sub> (mA)	Max. Zener Impedance			Max. Reverse Leakage Current I <sub>R</sub> @ V <sub>R</sub>	
		V <sub>Z</sub> (V)				Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	V <sub>R</sub> (V)
		Nom.	Min.	Max.						
BZT52C2V4WS	W1	2.4	2.28	2.52	5.0	85	600	1.0	100	1.0
BZT52C2V7WS	W2	2.7	2.57	2.84	5.0	83	600	1.0	75	1.0
BZT52C3V0WS	W3	3.0	2.85	3.15	5.0	95	600	1.0	50	1.0
BZT52C3V3WS	W4	3.3	3.14	3.47	5.0	95	600	1.0	25	1.0
BZT52C3V6WS	W5	3.6	3.42	3.78	5.0	95	600	1.0	15	1.0
BZT52C3V9WS	W6	3.9	3.71	4.10	5.0	95	600	1.0	10	1.0
BZT52C4V3WS	W7	4.3	4.09	4.52	5.0	95	600	1.0	5.0	1.0
BZT52C4V7WS	W8	4.7	4.47	4.94	5.0	78	500	1.0	5.0	1.0
BZT52C5V1WS	W9	5.1	4.85	5.36	5.0	60	480	1.0	0.1	0.8
BZT52C5V6WS	WA	5.6	5.32	5.88	5.0	40	400	1.0	0.1	1.0
BZT52C6V2WS	WB	6.2	5.89	6.51	5.0	10	150	1.0	0.1	2.0
BZT52C6V8WS	WC	6.8	6.46	7.14	5.0	8	80	1.0	0.1	3.0
BZT52C7V5WS	WD	7.5	7.13	7.88	5.0	7	80	1.0	0.1	5.0
BZT52C8V2WS	WE	8.2	7.79	8.61	5.0	7	80	1.0	0.1	6.0
BZT52C8V7WS	87C	8.7	8.27	9.14	5.0	7	100	1.0	0.1	6.5
BZT52C9V1WS	WF	9.1	8.65	9.56	5.0	10	100	1.0	0.1	7.0
BZT52C10WS	WG	10	9.50	10.50	5.0	15	150	1.0	0.1	7.5
BZT52C11WS	WH	11	10.45	11.55	5.0	20	150	1.0	0.1	8.5
BZT52C12WS	WI	12	11.40	12.60	5.0	20	150	1.0	0.1	9.0
BZT52C13WS	WK	13	12.35	13.65	5.0	25	170	1.0	0.1	10.0
BZT52C14WS	WJ	14	13.30	14.70	5.0	25	170	1.0	0.1	10.5
BZT52C15WS	WL	15	14.25	15.75	5.0	30	200	1.0	0.1	11.0
BZT52C16WS	WM	16	15.20	16.80	5.0	40	200	1.0	0.1	12.0
BZT52C17WS	17C	17	16.15	17.85	5.0	40	200	1.0	0.1	13.0
BZT52C18WS	WN	18	17.10	18.90	5.0	50	225	1.0	0.1	14.0
BZT52C20WS	WO	20	19.00	21.00	5.0	50	225	1.0	0.1	15.0
BZT52C22WS	WP	22	20.90	23.10	5.0	55	250	1.0	0.1	17.0
BZT52C24WS	WR	24	22.80	25.20	5.0	80	250	1.0	0.1	18.0
BZT52C27WS	WS	27	25.65	28.35	5.0	80	300	1.0	0.1	20.0
BZT52C28WS	28C	28	26.60	29.40	5.0	80	300	1.0	0.1	22.0
BZT52C30WS	WT	30	28.50	31.50	5.0	80	300	1.0	0.1	22.5
BZT52C33WS	WU	33	31.35	34.65	5.0	80	325	1.0	0.1	25.0

# 200mW Two Terminals SMD Zener Diodes

## BZT52C2V4WS - BZT52C51WS

Part NO.	Marking Code	Nominal Zener Voltage @ I <sub>ZT</sub>			Test Current I <sub>ZT</sub> (mA)	Max. Zener Impedance			Max. Reverse Leakage Current I <sub>R</sub> @ V <sub>R</sub>	
		V <sub>Z</sub> (V)				Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	V <sub>R</sub> (V)
		Nom.	Min.	Max.						
BZT52C36WS	WW	36	34.20	37.80	5.0	90	350	1.0	0.1	27.0
BZT52C39WS	WX	39	37.05	40.95	5.0	90	350	1.0	0.1	29.0
BZT52C43WS	WY	43	40.85	45.15	5.0	100	700	1.0	0.1	32.0
BZT52C47WS	WZ	47	44.65	49.35	5.0	100	750	1.0	0.1	35.0
BZT52C51WS	XA	51	48.45	53.55	5.0	100	750	1.0	0.1	38.0

### Typical Characteristics Curves

Fig.1- Steady State Power Derating

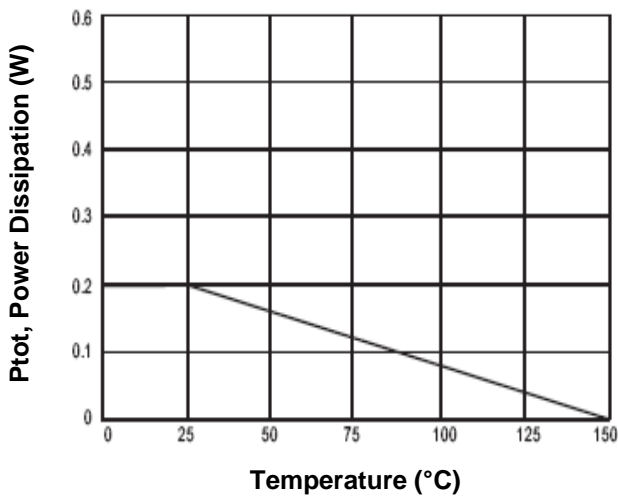


Fig.2- Typical Forward Characteristic

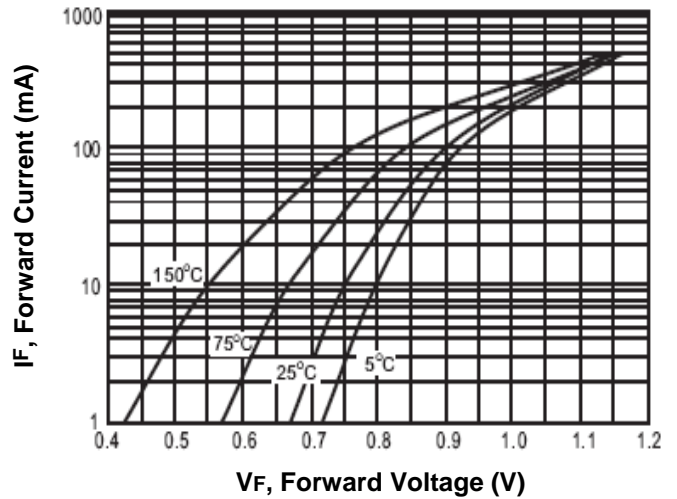


Fig.3-Temperature Coefficients

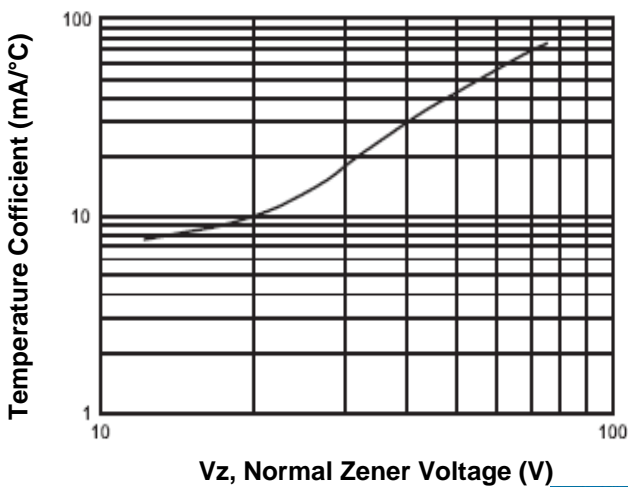
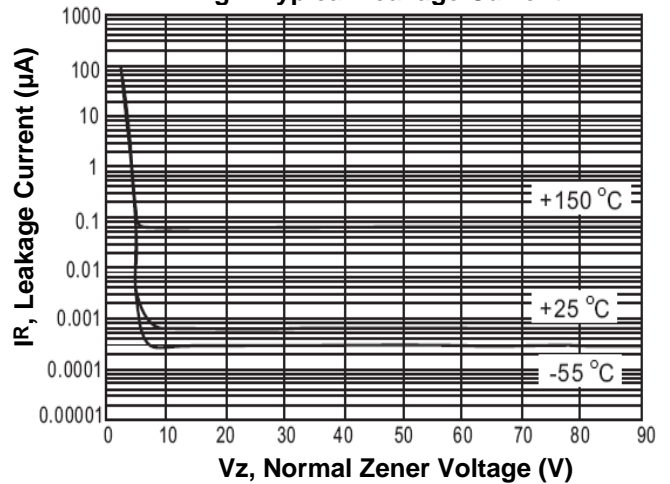


Fig.4-Typical Leakage Current

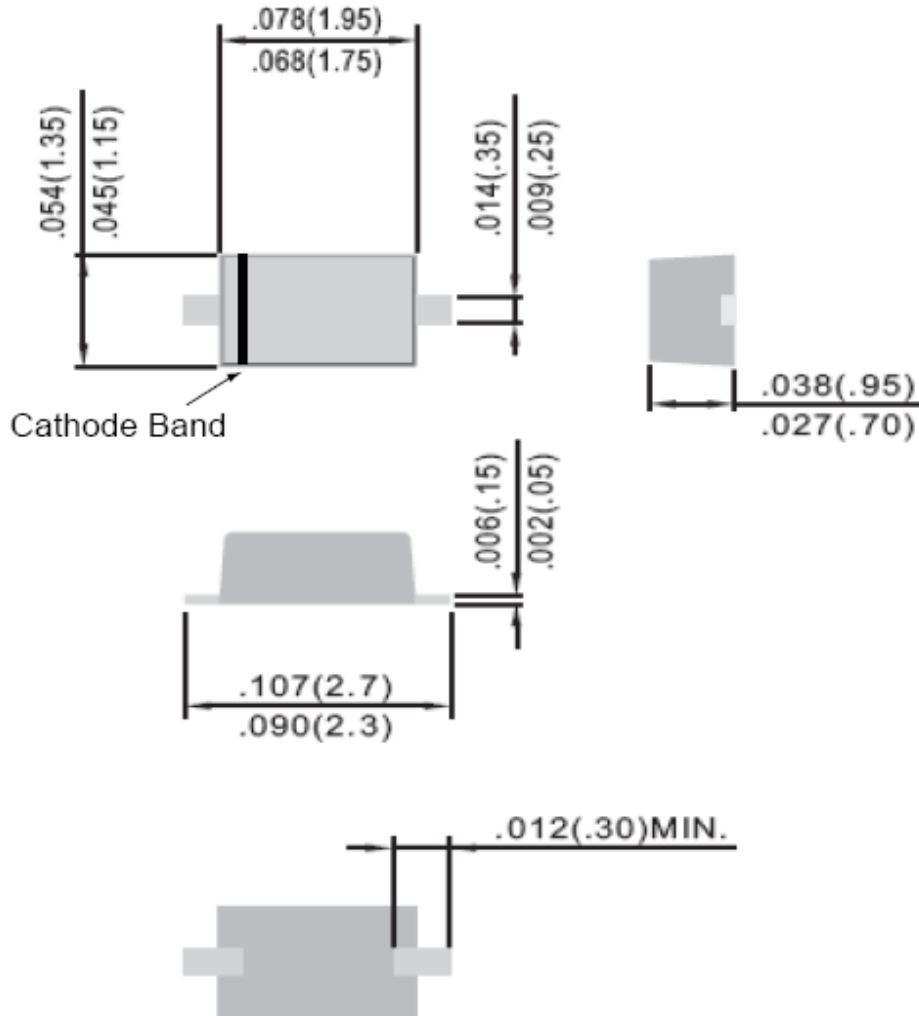


# 200mW Two Terminals SMD Zener Diodes

## BZT52C2V4WS - BZT52C51WS

Dimensions in inch (mm)

SOD-323F



## 200mW Two Terminals SMD Zener Diodes

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### BZT52C2V4WS - BZT52C51WS

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