

# BZT52C2V4SWAT THRU BZT52C43SWAT

## Silicon Planar Zener Diodes

Power Dissipation: 200mW Zener Voltage: 2.4V to 43V

### FEATURES

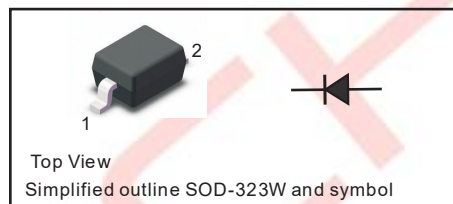
- ◆ Total power dissipation: Max. 200mW.
- ◆ Wide zener reverse voltage range 2.4V to 43V.
- ◆ Ideally suited for automated assembly processes

### MECHANICAL DATA

- ◆ Case: SOD-323W
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 5.48mg / 0.00019oz

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation (NOTE 1)	$P_D$	200	mW
Forward Voltage at $I_F = 10$ mA(NOTE 2)	$V_F$	0.9	V
Typical thermal resistance juncting to ambient	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

Fig.1 Power Derating Curve

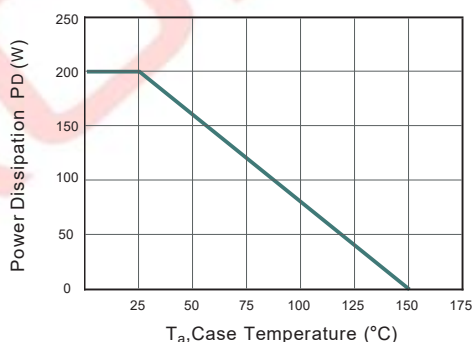
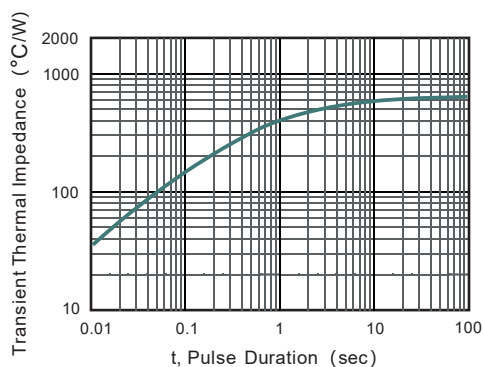


Fig.2 Typical Transient Thermal Impedance



# BZT52C2V4SWAT THRU BZT52C43SWAT

## Characteristics at Ta = 25°C

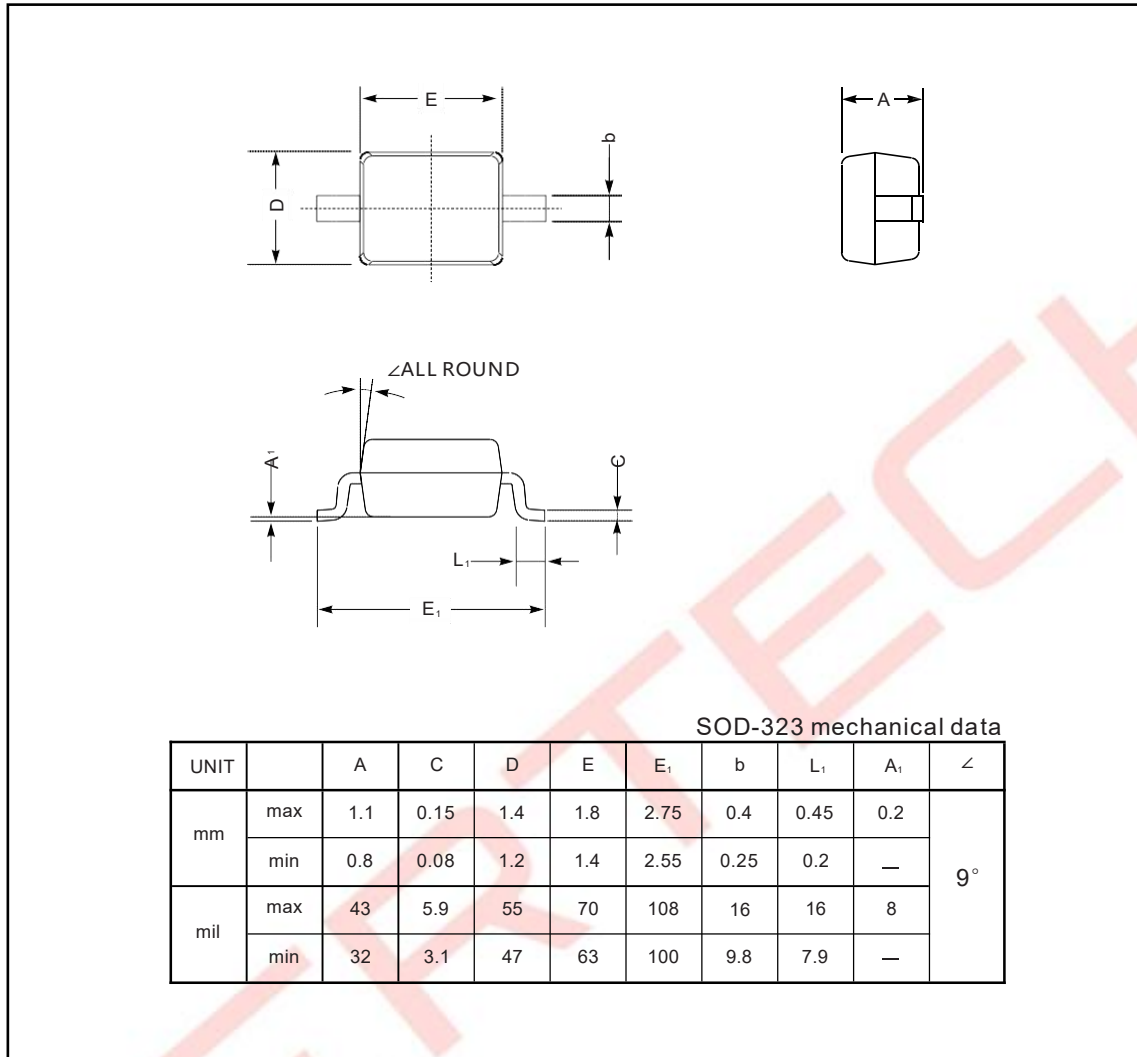
Type	Marking	Zener Voltage Range (NOTE 2)				Maximum Zener Impedance (NOTE 3)			Maximum Reverse Current (NOTE 2)		Typical Temperature Coefficient @I <sub>ZTC</sub> mV/°C		Test Current I <sub>ZTC</sub> mA
		V <sub>ZT</sub> (@ I <sub>ZT</sub> )			I <sub>ZT</sub>	Z <sub>ZT</sub> (@ I <sub>ZT</sub> )	Z <sub>ZK</sub> (@ I <sub>ZK</sub> )	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>	MIN	MAX	
		Min (V)	Nom (V)	Max (V)	(mA)	(Ω)		mA	μA	V			
BZT52C2V4SWAT	WX	2.2	2.4	2.6	5	100	600	1	50	1	-3.5	0	5
BZT52C2V7SWAT	W1	2.5	2.7	2.9	5	100	600	1	20	1	-3.5	0	5
BZT52C3V0SWAT	W2	2.8	3	3.2	5	95	600	1	10	1	-3.5	0	5
BZT52C3V3SWAT	W3	3.1	3.3	3.5	5	95	600	1	5	1	-3.5	0	5
BZT52C3V6SWAT	W4	3.4	3.6	3.8	5	90	600	1	5	1	-3.5	0	5
BZT52C3V9SWAT	W5	3.7	3.9	4.1	5	90	600	1	3	1	-3.5	0	5
BZT52C4V3SWAT	W6	4	4.3	4.6	5	90	600	1	3	1	-3.5	0	5
BZT52C4V7SWAT	W7	4.4	4.7	5	5	80	500	1	3	2	-3.5	0.2	5
BZT52C5V1SWAT	W8	4.8	5.1	5.4	5	60	480	1	2	2	-2.7	1.2	5
BZT52C5V6SWAT	W9	5.2	5.6	6	5	40	400	1	1	2	-2	2.5	5
BZT52C6V2SWAT	WA	5.8	6.2	6.6	5	10	150	1	3	4	0.4	3.7	5
BZT52C6V8SWAT	WB	6.4	6.8	7.2	5	15	80	1	2	4	1.2	4.5	5
BZT52C7V5SWAT	WC	7	7.5	7.9	5	15	80	1	1	5	2.5	5.3	5
BZT52C8V2SWAT	WD	7.7	8.2	8.7	5	15	80	1	0.7	5	3.2	6.2	5
BZT52C9V1SWAT	WE	8.5	9.1	9.6	5	15	100	1	0.5	6	3.8	7	5
BZT52C10SWAT	WF	9.4	10	10.6	5	20	150	1	0.2	7	4.5	8	5
BZT52C11SWAT	WG	10.4	11	11.6	5	20	150	1	0.1	8	5.4	9	5
BZT52C12SWAT	WH	11.4	12	12.7	5	25	150	1	0.1	8	6	10	5
BZT52C13SWAT	WI	12.4	13	14.1	5	30	170	1	0.1	8	7	11	5
BZT52C15SWAT	WJ	13.8	15	15.6	5	30	200	1	0.1	10.5	9.2	13	5
BZT52C16SWAT	WK	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14	5
BZT52C18SWAT	WL	16.8	18	19.1	5	45	225	1	0.1	12.6	12.4	16	5
BZT52C20SWAT	WM	18.8	20	21.2	5	55	225	1	0.1	14	14.4	18	5
BZT52C22SWAT	WN	20.8	22	23.3	5	55	250	1	0.1	15.4	16.4	20	5
BZT52C24SWAT	WO	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22	5
BZT52C27SWAT	WP	25.1	27	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
BZT52C30SWAT	WQ	28	30	32	2	80	300	0.5	0.1	21	24.4	29.4	2
BZT52C33SWAT	WR	31	33	35	2	80	325	0.5	0.1	23.1	27.4	33.4	2
BZT52C36SWAT	WS	34	36	38	2	90	350	0.5	0.1	25.2	30.4	37.4	2
BZT52C39SWAT	WT	37	39	41	2	130	350	0.5	0.1	27.3	33.4	41.2	2
BZT52C43SWAT	WU	40	43	46	2	100	700	1	0.1	32	10	12	5

NOTE: 1. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm<sup>2</sup> .  
 2. Short duration test pulse used to minimize self-heating effect.  
 3. f = 1kHz.

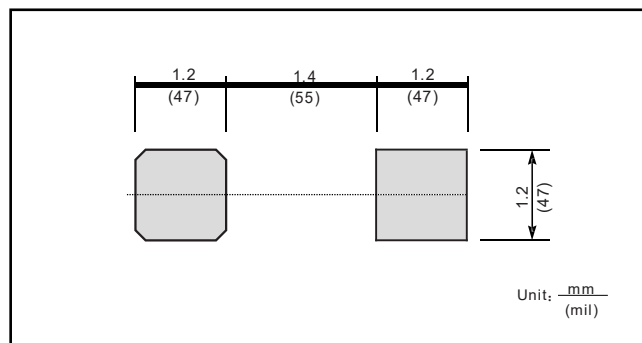
# BZT52C2V4SWAT THRU BZT52C43SWAT

## Package Outline

SOD-323w



### The recommended mounting pad size



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [Agertech](#) manufacturer:*

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#)  
[1N747A](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#)  
[1N4745ARL](#) [1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#)  
[3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4732A-T3](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD39S-T1-A](#)