



# BZT52-B2V4S SERIES

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 2.4 to 75 Volt    **POWER** 200 mWatt

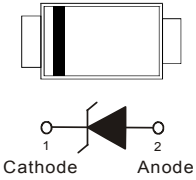
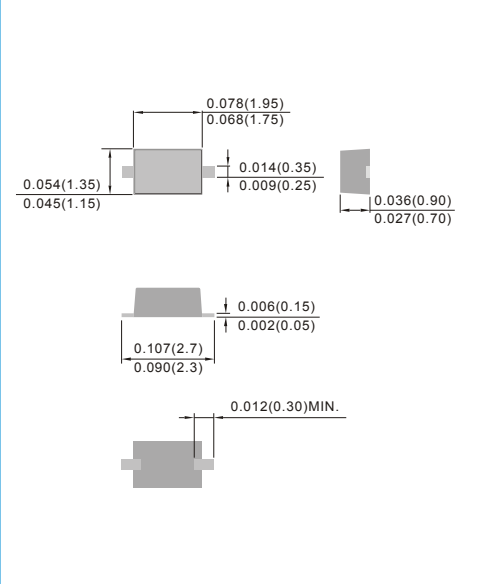
**SOD-323**    Unit : inch(mm)

### FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.00014 ounces, 0.0041 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation @ $T_A=25^{\circ}\text{C}$ (Note A)	$P_D$	200	mW
Typical Thermal Resistance(Note B)	$R_{\theta JA}$	650	$^{\circ}\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J$	-55 to +150	$^{\circ}\text{C}$

**NOTES:**

- A. Mounted on a FR-4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
- B. Mounted on a FR-4 PCB, single-sided copper, mini pad.

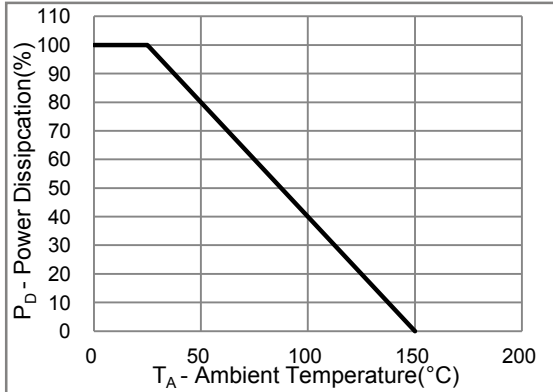


# BZT52-B2V4S SERIES

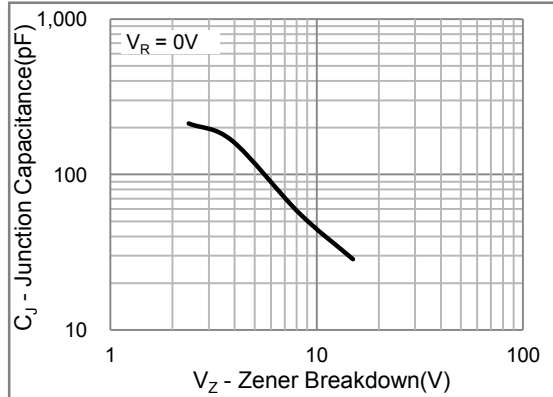
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
200 mWatts Zener Diodes										
BZT52-B2V4S	2.4	2.35	2.45	85	5.0	600	1.00	100	1.0	W1
BZT52-B2V7S	2.7	2.64	2.75	83	5.0	600	1.00	75	1.0	W2
BZT52-B3S	3.0	2.94	3.06	95	5.0	600	1.00	50	1.0	W3
BZT52-B3V3S	3.3	3.23	3.37	95	5.0	600	1.00	25	1.0	W4
BZT52-B3V6S	3.6	3.52	3.67	95	5.0	600	1.00	15	1.0	W5
BZT52-B3V9S	3.9	3.82	3.98	95	5.0	600	1.00	10	1.0	W6
BZT52-B4V3S	4.3	4.21	4.39	95	5.0	600	1.00	5.0	1.0	W7
BZT52-B4V7S	4.7	4.61	4.79	78	5.0	500	1.00	5.0	1.0	W8
BZT52-B5V1S	5.1	5.00	5.20	60	5.0	480	1.00	0.1	0.8	W9
BZT52-B5V6S	5.6	5.49	5.71	40	5.0	400	1.00	0.1	1.0	WA
BZT52-B5V8S	5.8	5.68	5.92	30	5.0	300	1.00	0.1	1.5	85C
BZT52-B6V2S	6.2	6.08	6.32	10	5.0	150	1.00	0.1	2.0	WB
BZT52-B6V8S	6.8	6.66	6.94	8	5.0	80	1.00	0.1	3.0	WC
BZT52-B7V5S	7.5	7.35	7.65	7	5.0	80	1.00	0.1	5.0	WD
BZT52-B8V2S	8.2	8.04	8.36	7	5.0	80	1.00	0.1	6.0	WE
BZT52-B8V7S	8.7	8.53	8.87	7	5.0	100	1.00	0.1	6.5	87C
BZT52-B9V1S	9.1	8.92	9.28	10	5.0	100	1.00	0.1	7.0	WF
BZT52-B10S	10	9.80	10.20	15	5.0	150	1.00	0.1	7.5	WG
BZT52-B11S	11	10.78	11.22	20	5.0	150	1.00	0.1	8.5	WH
BZT52-B12S	12	11.76	12.24	20	5.0	150	1.00	0.1	9.0	WI
BZT52-B13S	13	12.74	13.26	25	5.0	170	1.00	0.1	10.0	WK
BZT52-B14S	14	13.72	14.28	25	5.0	170	1.00	0.1	10.5	WJ
BZT52-B15S	15	14.70	15.30	30	5.0	200	1.00	0.1	11.0	WL
BZT52-B16S	16	15.68	16.32	40	5.0	200	1.00	0.1	12.0	WM
BZT52-B17S	17	16.66	17.34	40	5.0	200	1.00	0.1	13.0	17C
BZT52-B18S	18	17.64	18.36	50	5.0	225	1.00	0.1	14.0	WN
BZT52-B20S	20	19.60	20.40	50	5.0	225	1.00	0.1	15.0	WO
BZT52-B22S	22	21.56	22.44	55	5.0	250	1.00	0.1	17.0	WP
BZT52-B24S	24	23.52	24.48	80	5.0	250	1.00	0.1	18.0	WR
BZT52-B27S	27	26.46	27.54	80	5.0	300	1.00	0.1	20.0	WS
BZT52-B28S	28	27.44	28.56	80	5.0	300	1.00	0.1	22.0	28C
BZT52-B30S	30	29.40	30.60	80	5.0	300	1.00	0.1	22.5	WT
BZT52-B33S	33	32.34	33.66	80	5.0	325	1.00	0.1	25.0	WU
BZT52-B36S	36	35.28	36.72	90	5.0	350	1.00	0.1	27.0	WW
BZT52-B39S	39	38.22	39.78	90	5.0	350	1.00	0.1	29.0	WX
BZT52-B43S	43	42.14	43.86	100	5.0	375	1.00	0.1	32.0	WY
BZT52-B47S	47	46.06	47.94	100	5.0	375	1.00	0.1	35.0	WZ
BZT52-B51S	51	49.98	52.02	100	5.0	400	1.00	0.1	38.0	XA
BZT52-B56S	56	54.88	57.12	135	2.5	1000	1.00	0.1	42.0	X2
BZT52-B62S	62	60.76	63.24	150	2.5	1000	1.00	0.1	46.0	X3
BZT52-B68S	68	66.64	69.36	200	2.5	1000	1.00	0.1	51.0	X4
BZT52-B75S	75	73.50	76.50	250	2.5	1000	1.00	0.1	56.0	X5



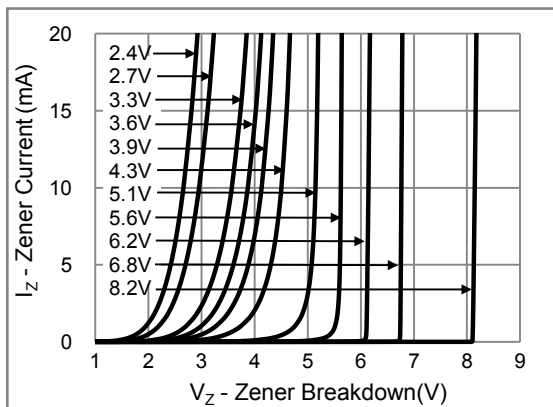
# BZT52-B2V4S SERIES



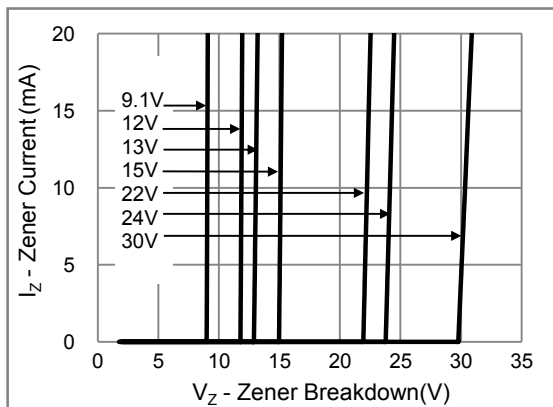
**Fig.1 Power Derating Curve**



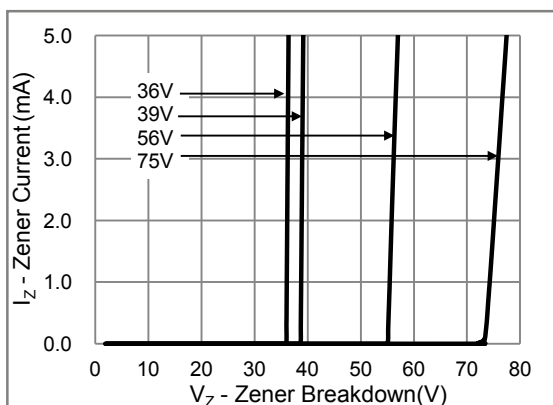
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Zener Breakdown**



**Fig.4 Typical Zener Breakdown**

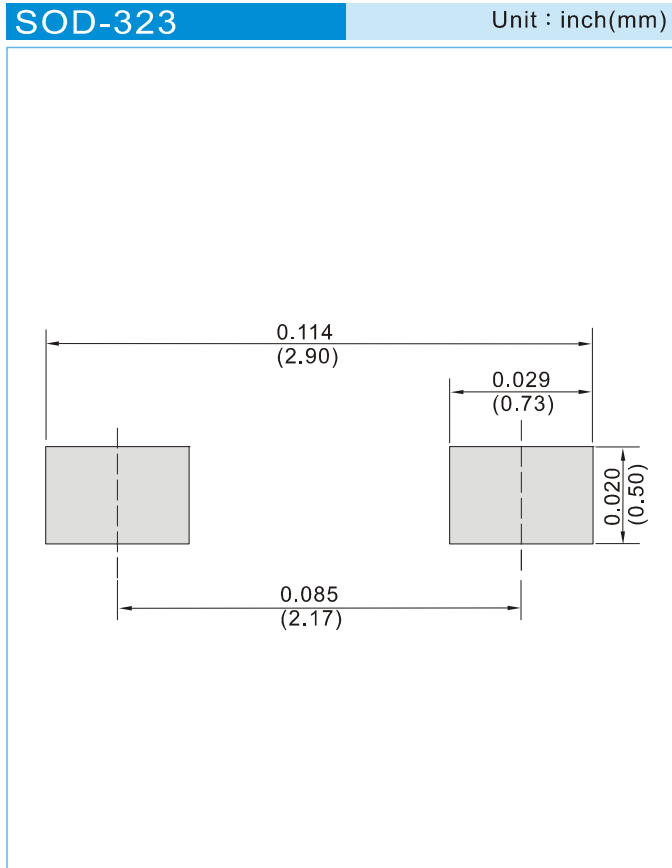


**Fig.5 Typical Zener Breakdown**



## BZT52-B2V4S SERIES

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 12K per 13" plastic Reel  
T/R - 5K per 7" plastic Reel



## BZT52-B2V4S SERIES

### Part No\_packing code\_Version

BZT52-B2V4S\_R1\_00001

BZT52-B2V4S\_R2\_00001

For example :

**RB500V-40** **R2** **00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



## BZT52-B2V4S SERIES

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Panjit:](#)

[BZT52-B13S\\_R1\\_00001](#) [BZT52-B13S\\_R1\\_10001](#) [BZT52-B13S\\_R2\\_00001](#) [BZT52-B13S\\_R2\\_10001](#)