



**THE DATASHEET OF  
BZT52-C3S\_R1\_00001**





# BZT52-C2V4S SERIES

## SURFACE MOUNT SILICON ZENER DIODES

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

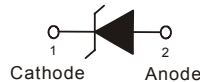
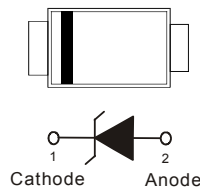
**SOD-323** Unit : inch(mm)

### 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
- Approx. Weight: 0.00014 ounces, 0.0041 grams
- Polarity : Color band cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation (Notes A) at T <sub>A</sub> = 25°C	P <sub>D</sub>	200	mW
Typical Thermal Resistance	R <sub>θJA</sub>	650	°C/W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub>	-55 to +150	°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

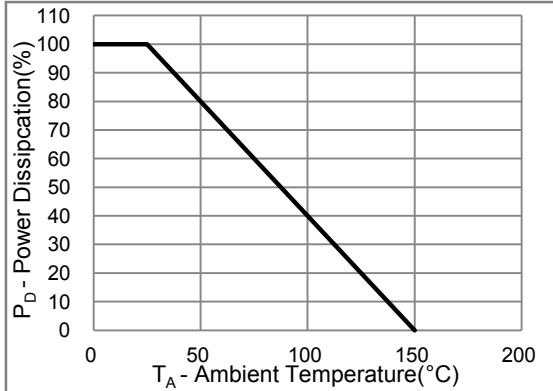


# BZT52-C2V4S SERIES

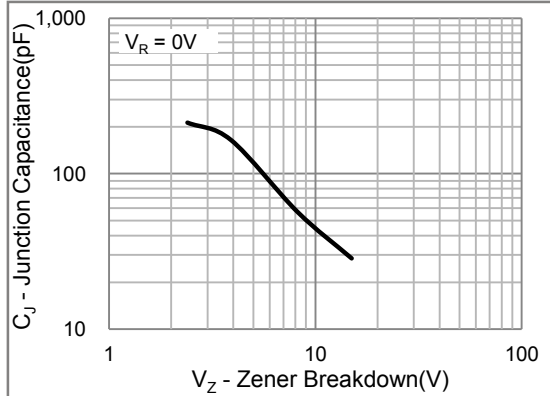
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>TT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
<b>200 mWatts Zener Diodes</b>										
BZT52-C2V4S	2.4	2.28	2.52	85	5.0	600	1.00	100	1.0	W1
BZT52-C2V7S	2.7	2.57	2.84	83	5.0	600	1.00	75	1.0	W2
BZT52-C3S	3.0	2.85	3.15	95	5.0	600	1.00	50	1.0	W3
BZT52-C3V3S	3.3	3.14	3.47	95	5.0	600	1.00	25	1.0	W4
BZT52-C3V6S	3.6	3.42	3.78	95	5.0	600	1.00	15	1.0	W5
BZT52-C3V9S	3.9	3.71	4.10	95	5.0	600	1.00	10	1.0	W6
BZT52-C4V3S	4.3	4.09	4.52	95	5.0	600	1.00	5.0	1.0	W7
BZT52-C4V7S	4.7	4.47	4.94	78	5.0	500	1.00	5.0	1.0	W8
BZT52-C5V1S	5.1	4.85	5.36	60	5.0	480	1.00	0.1	0.8	W9
BZT52-C5V6S	5.6	5.32	5.88	40	5.0	400	1.00	0.1	1.0	WA
BZT52-C6V2S	6.2	5.89	6.51	10	5.0	150	1.00	0.1	2.0	WB
BZT52-C6V8S	6.8	6.46	7.14	8	5.0	80	1.00	0.1	3.0	WC
BZT52-C7V5S	7.5	7.13	7.88	7	5.0	80	1.00	0.1	5.0	WD
BZT52-C8V2S	8.2	7.79	8.61	7	5.0	80	1.00	0.1	6.0	WE
BZT52-C8V7S	8.7	8.27	9.14	7	5.0	100	1.00	0.1	6.5	87C
BZT52-C9V1S	9.1	8.65	9.56	10	5.0	100	1.00	0.1	7.0	WF
BZT52-C10S	10	9.50	10.50	15	5.0	150	1.00	0.1	7.5	WG
BZT52-C11S	11	10.45	11.55	20	5.0	150	1.00	0.1	8.5	WH
BZT52-C12S	12	11.40	12.60	20	5.0	150	1.00	0.1	9.0	WI
BZT52-C13S	13	12.35	13.65	25	5.0	170	1.00	0.1	10.0	WK
BZT52-C14S	14	13.30	14.70	25	5.0	170	1.00	0.1	10.5	WJ
BZT52-C15S	15	14.25	15.75	30	5.0	200	1.00	0.1	11.0	WL
BZT52-C16S	16	15.20	16.80	40	5.0	200	1.00	0.1	12.0	WM
BZT52-C17S	17	16.15	17.85	40	5.0	200	1.00	0.1	13.0	17C
BZT52-C18S	18	17.10	18.90	50	5.0	225	1.00	0.1	14.0	WN
BZT52-C20S	20	19.00	21.00	50	5.0	225	1.00	0.1	15.0	WO
BZT52-C22S	22	20.90	23.10	55	5.0	250	1.00	0.1	17.0	WP
BZT52-C24S	24	22.80	25.20	80	5.0	250	1.00	0.1	18.0	WR
BZT52-C27S	27	25.65	28.35	80	5.0	300	1.00	0.1	20.0	WS
BZT52-C28S	28	26.60	29.40	80	5.0	300	1.00	0.1	22.0	28C
BZT52-C30S	30	28.50	31.50	80	5.0	300	1.00	0.1	22.5	WT
BZT52-C33S	33	31.35	34.65	80	5.0	325	1.00	0.1	25.0	WU
BZT52-C36S	36	34.20	37.80	90	5.0	350	1.00	0.1	27.0	WW
BZT52-C39S	39	37.05	40.95	90	5.0	350	1.00	0.1	29.0	WX
BZT52-C43S	43	40.85	45.15	100	5.0	375	1.00	0.1	32.0	WY
BZT52-C47S	47	44.65	49.35	100	5.0	375	1.00	0.1	35.0	WZ
BZT52-C51S	51	48.45	53.55	100	5.0	400	1.00	0.1	38.0	XA
BZT52-C56S	56	53.20	58.80	135	2.5	1000	1.00	0.1	42.0	X2
BZT52-C62S	62	58.90	65.10	150	2.5	1000	1.00	0.1	46.0	X3
BZT52-C68S	68	64.60	71.40	200	2.5	1000	1.00	0.1	51.0	X4
BZT52-C75S	75	71.25	78.75	250	2.5	1000	1.00	0.1	56.0	X5



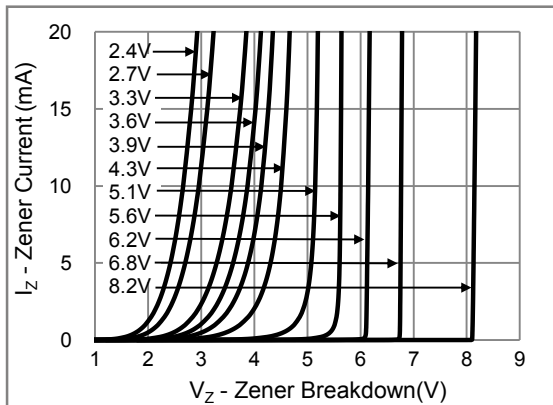
# BZT52-C2V4S SERIES



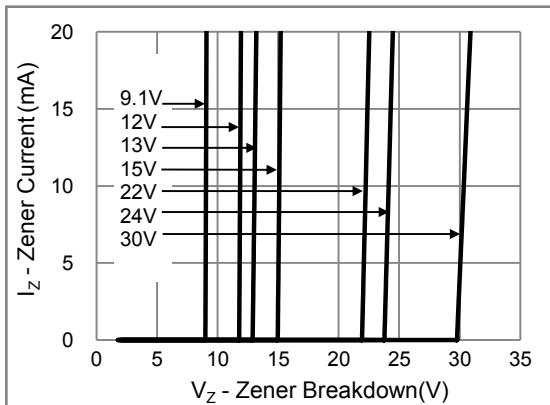
**Fig.1 Power Derating Curve**



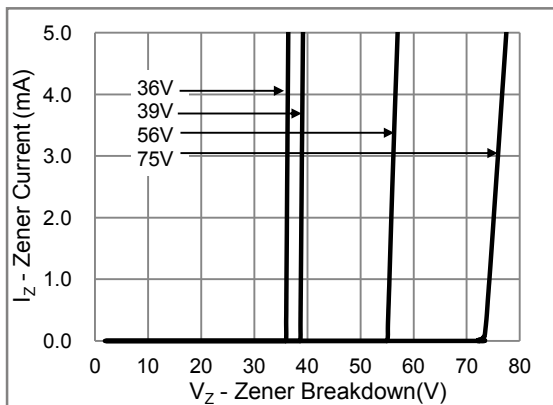
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Zener Breakdown**



**Fig.4 Typical Zener Breakdown**



**Fig.5 Typical Zener Breakdown**

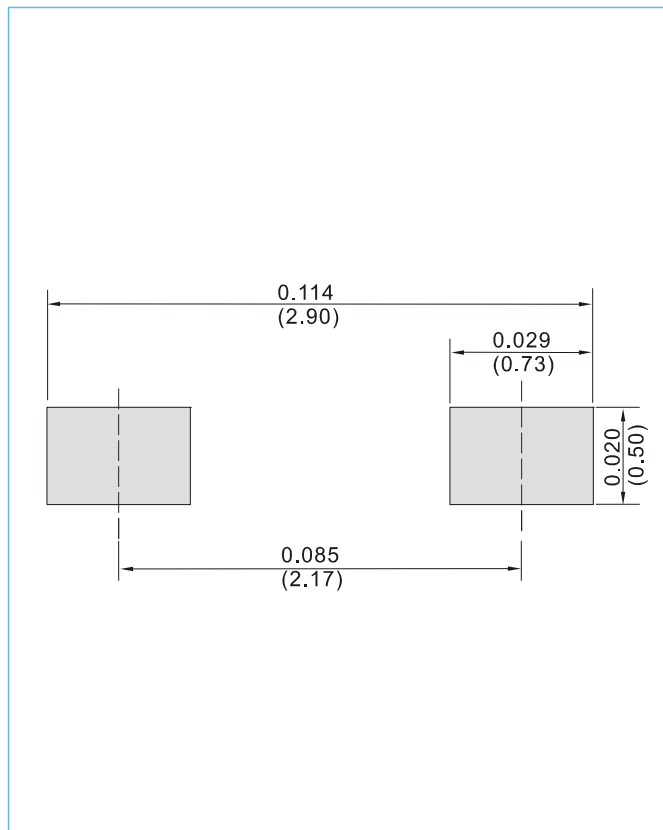


# BZT52-C2V4S SERIES

## MOUNTING PAD LAYOUT

SOD-323

Unit : inch(mm)



## ORDER INFORMATION

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



# BZT52-C2V4S SERIES

**Part No.\_packing code\_Version**

BZT52-C2V4S\_R1\_00001

BZT52-C2V4S\_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>	HF	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	RoHS	<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-C2V4S 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.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View BZT52-C3S\\_R1\\_00001 on WIN SOURCE](#)
-  [Panjit Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management