



## BZT52B2V4S THRU BZT52B75S

**200 mW  
Zener Diode  
2.4 to 75 Volts**

### Features

- Planar Die Construction
- 200mW Power Dissipation
- General Purpose Medium Current
- Ideally Suited for Automated Assembly Processes
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

### Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
$P_D$	Power dissipation*	200	mW
$T_J$	Junction Temperature	-55 to +175	°C
$T_{STG}$	Storage Temperature Range	-55 to +175	°C

\* Mounted on 5.0mm<sup>2</sup> (.013mm thick) land areas.

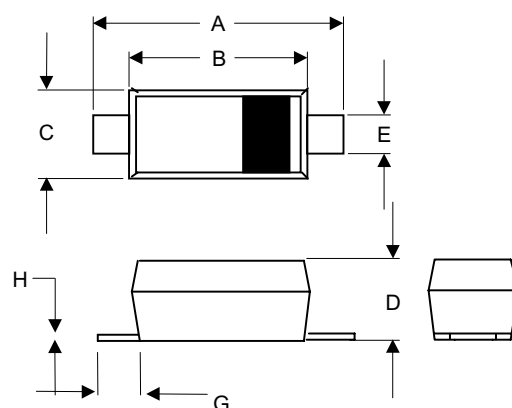
### Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
$R_{thJA}$	Thermal Resistance Junction to Ambient*	625	°C/W

### Electrical Characteristics

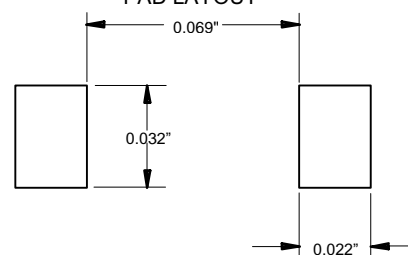
Symbol	Parameter	Rating	Unit
$V_F$	Maximum Forward Voltage ( $I_F=10mA_{dc}$ )	0.9	V

### SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.068	.078	1.75	1.95	
C	.045	.053	1.15	1.35	
D	.027	.038	0.70	0.95	
E	.010	.014	0.25	0.35	
G	.012	---	0.30	---	
H	.002	.006	0.05	0.15	

#### SUGGESTED SOLDER PAD LAYOUT



**Electrical Characteristics@25°C**

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	
BZT52B2V4S	2.4	2.35	2.45	85	5.0	600	1.00	100	1.0	W1
BZT52B2V7S	2.7	2.64	2.75	83	5.0	600	1.00	75	1.0	W2
BZT52B3V0S	3.0	2.94	3.06	95	5.0	600	1.00	50	1.0	W3
BZT52B3V3S	3.3	3.23	3.37	95	5.0	600	1.00	25	1.0	W4
BZT52B3V6S	3.6	3.52	3.67	95	5.0	600	1.00	15	1.0	W5
BZT52B3V9S	3.9	3.82	3.98	95	5.0	600	1.00	10	1.0	W6
BZT52B4V3S	4.3	4.21	4.39	95	5.0	600	1.00	5.0	1.0	W7
BZT52B4V7S	4.7	4.61	4.79	78	5.0	500	1.00	5.0	1.0	W8
BZT52B5V1S	5.1	5.00	5.20	60	5.0	480	1.00	0.1	0.8	W9
BZT52B5V6S	5.6	5.49	5.71	40	5.0	400	1.00	0.1	1.0	WA
BZT52B5V8S	5.8	5.68	5.92	30	5.0	300	1.00	0.1	1.5	85C
BZT52B6V2S	6.2	6.08	6.32	10	5.0	150	1.00	0.1	2.0	WB
BZT52B6V8S	6.8	6.66	6.94	8	5.0	80	1.00	0.1	3.0	WC
BZT52B7V5S	7.5	7.35	7.65	7	5.0	80	1.00	0.1	5.0	WD
BZT52B8V2S	8.2	8.04	8.36	7	5.0	80	1.00	0.1	6.0	WE
BZT52B8V7S	8.7	8.53	8.87	7	5.0	100	1.00	0.1	6.5	87C
BZT52B9V1S	9.1	8.92	9.28	10	5.0	100	1.00	0.1	7.0	WF
BZT52B10S	10	9.80	10.20	15	5.0	150	1.00	0.1	7.5	WG
BZT52B11S	11	10.78	11.22	20	5.0	150	1.00	0.1	8.5	WH
BZT52B12S	12	11.76	12.24	20	5.0	150	1.00	0.1	9.0	WI
BZT52B13S	13	12.74	13.26	25	5.0	170	1.00	0.1	10.0	WK
BZT52B14S	14	13.72	14.28	25	5.0	170	1.00	0.1	10.5	WJ
BZT52B15S	15	14.70	15.30	30	5.0	200	1.00	0.1	11.0	WL
BZT52B16S	16	15.68	16.32	40	5.0	200	1.00	0.1	12.0	WM
BZT52B17S	17	16.66	17.34	40	5.0	200	1.00	0.1	13.0	17C
BZT52B18S	18	17.64	18.36	50	5.0	225	1.00	0.1	14.0	WN
BZT52B20S	20	19.60	20.40	50	5.0	225	1.00	0.1	15.0	WO
BZT52B22S	22	21.56	22.44	55	5.0	250	1.00	0.1	17.0	WP
BZT52B24S	24	23.52	24.48	80	5.0	250	1.00	0.1	18.0	WR
BZT52B27S	27	26.46	27.54	80	5.0	300	1.00	0.1	20.0	WS
BZT52B28S	28	27.44	28.56	80	5.0	300	1.00	0.1	22.0	28C
BZT52B30S	30	29.40	30.60	80	5.0	300	1.00	0.1	22.5	WT
BZT52B33S	33	32.34	33.66	80	5.0	325	1.00	0.1	25.0	WU
BZT52B36S	36	35.28	36.72	90	5.0	350	1.00	0.1	27.0	WW
BZT52B39S	39	38.22	39.78	90	5.0	350	1.00	0.1	29.0	WX
BZT52B43S	43	42.14	43.86	100	5.0	375	1.00	0.1	32.0	WY
BZT52B47S	47	46.06	47.94	100	5.0	375	1.00	0.1	35.0	WZ
BZT52B51S	51	49.98	52.02	100	5.0	400	1.00	0.1	38.0	XA
BZT52B56S	56	54.88	57.12	135	2.5	1000	1.00	0.1	42.0	X2
BZT52B62S	62	60.76	63.24	150	2.5	1000	1.00	0.1	46.0	X3
BZT52B68S	68	66.64	69.36	200	2.5	1000	1.00	0.1	51.0	X4
BZT52B75S	75	73.50	76.50	250	2.5	1000	1.00	0.1	56.0	X5

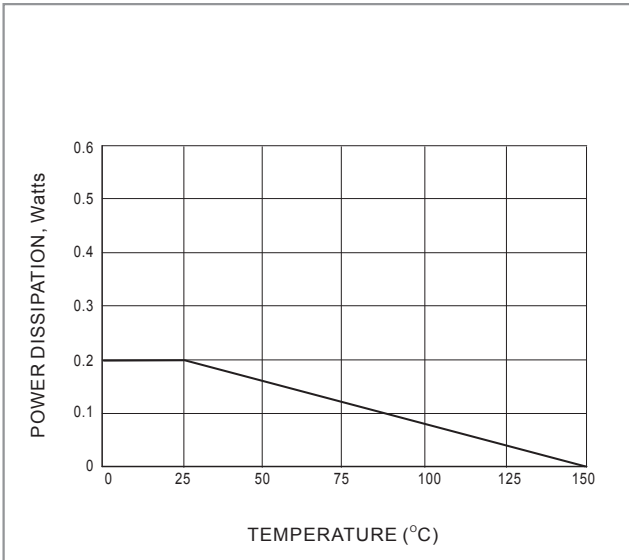


Fig.1 STEADY STATE POWER DERATING

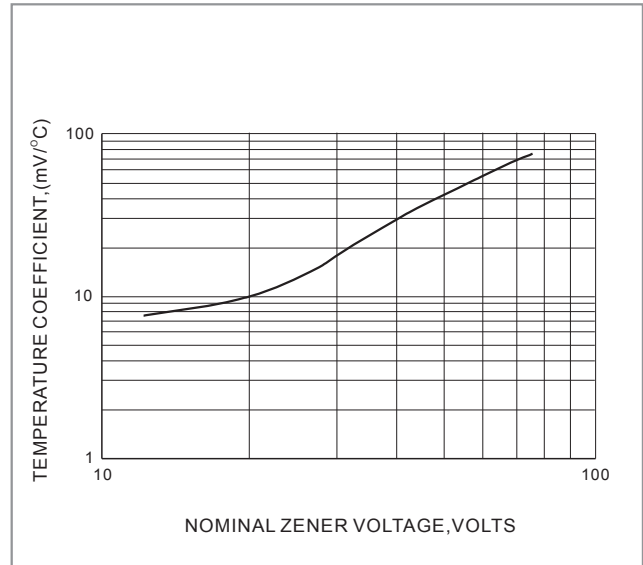


Fig.2 TEMPERATURE COEFFICIENTS

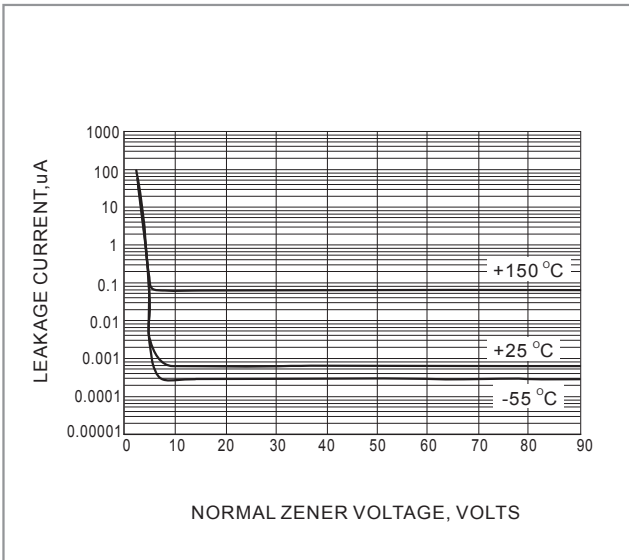


Fig.3 TYPICAL LEAKAGE CURRENT

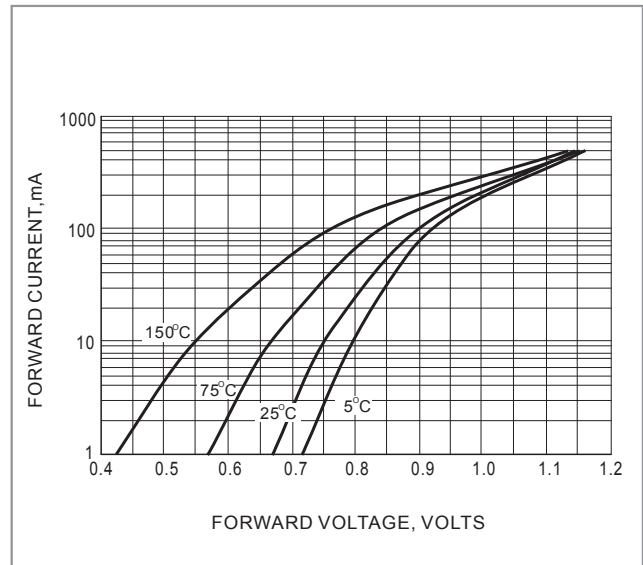


Fig.4 TYPICAL FORWARD VOLTAGE



Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.