



BZT52C2V4S THRU BZT52C39S

**200 mW
Zener Diode
2.4 to 39 Volts**

Features

- Planar Die Construction
- 200mW Power Dissipation on Ceramic PCB
- 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	-65 to +150	°C
T_{STG}	Storage Temperature Range	-65 to +150	°C

Absolute Maximum Ratings

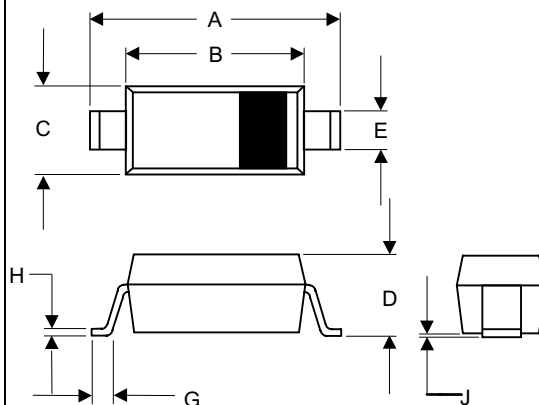
Symbol	Parameter	Rating	Unit
R_{thJA}	Thermal Resistance Junction to Ambient*	625	°C/W

* Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25 mm²

Electrical Characteristics

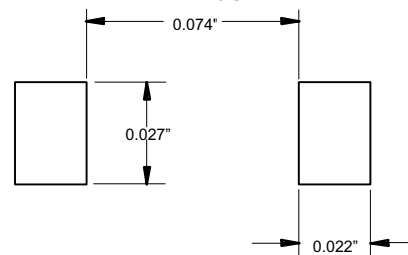
Symbol	Parameter	Rating	Unit
V_F	Maximum Forward Voltage ($I_F=10mA$)	0.9	V

SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL CHARACTERISTICS @25°C

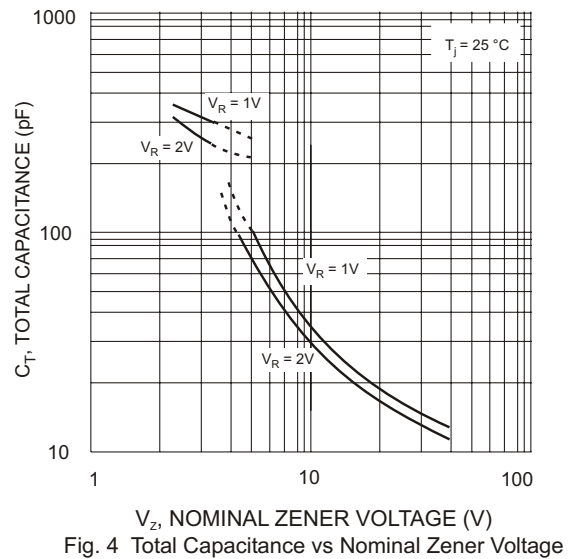
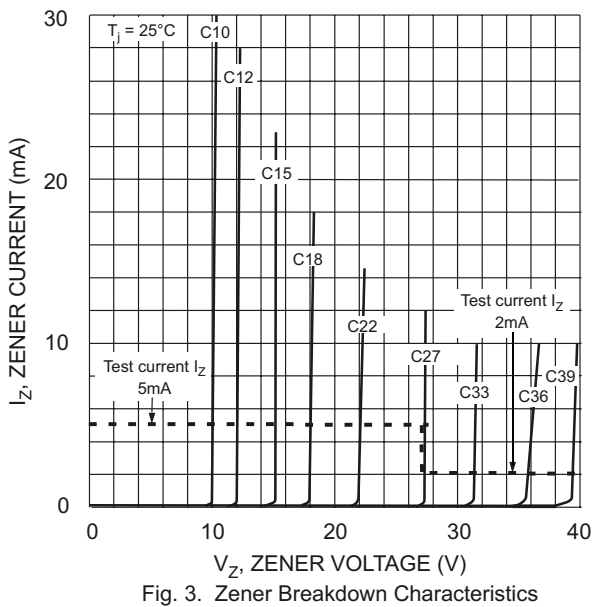
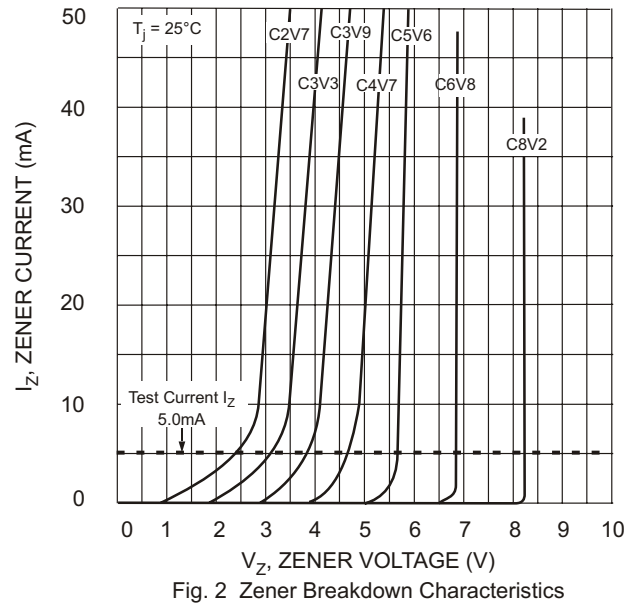
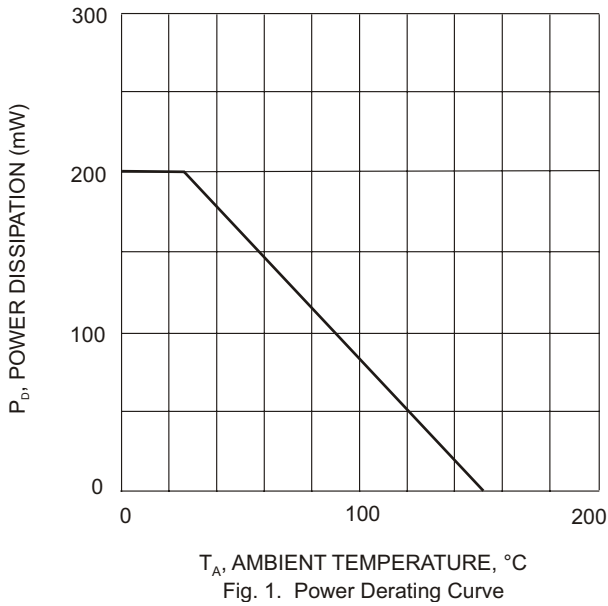
Type	ZENER VOLTAGE $V_Z^{(1)}$ VOLTS			Maximum Zener Impedance ⁽²⁾ Z_{ZT} (OHMS)		Maximum Zener Impedance ⁽²⁾ Z_{ZK} (OHMS)		REVERSE CURRENT I_R (Max) @ V_R		Typical Temperature Coefficient @ I_{ZTC}		Marking
	Min.	Nom	Max.	I_{ZT} (mA)	Max.	I_{ZK} (mA)	Max.	uA	V	mV/°C		
BZT52C2V4S	2.28	2.4	2.56	5	100	1.0	600	50	1.0	-3.5	0	WX
BZT52C2V7S	2.5	2.7	2.9	5	100	1.0	600	20	1.0	-3.5	0	W1
BZT52C3V0S	2.8	3.0	3.2	5	95	1.0	600	10	1.0	-3.5	0	W2
BZT52C3V3S	3.1	3.3	3.5	5	95	1.0	600	5	1.0	-3.5	0	W3
BZT52C3V6S	3.4	3.6	3.8	5	90	1.0	600	5	1.0	-3.5	0	W4
BZT52C3V9S	3.7	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0	W5
BZT52C4V3S	4.0	4.3	4.6	5	90	1.0	600	3	1.0	-3.5	0	W6
BZT52C4V7S	4.4	4.7	5.0	5	80	1.0	500	3	2.0	-3.5	0.2	W7
BZT52C5V1S	4.8	5.1	5.4	5	60	1.0	480	2	2.0	-2.7	1.2	W8
BZT52C5V6S	5.2	5.6	6.0	5	40	1.0	400	1	2.0	-2.0	2.5	W9
BZT52C6V2S	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7	WA
BZT52C6V8S	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5	WB
BZT52C7V5S	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3	WC
BZT52C8V2S	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2	WD
BZT52C9V1S	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0	WE
BZT52C10S	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0	WF
BZT52C11S	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0	WG
BZT52C12S	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0	WH
BZT52C13S	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0	WI
BZT52C15S	13.8	15	15.6	5	30	1.0	200	0.1	10.5	9.2	13.0	WJ
BZT52C16S	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0	WK
BZT52C18S	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0	WL
BZT52C20S	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0	WM
BZT52C22S	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0	WN
BZT52C24S	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0	WO
BZT52C27S	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3	WP
BZT52C30S	28	30	32	2	80	0.5	300	0.1	21.0	24.4	29.4	WQ
BZT52C33S	31	33	35	2	80	0.5	325	0.1	23.1	27.4	33.4	WR
BZT52C36S	34	36	38	2	90	0.5	350	0.1	25.2	30.4	37.4	WS
BZT52C39S	37	39	41	2	130	0.5	350	0.1	27.3	33.4	41.2	WT

(1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25 mm²

(2) f=1KHz

BZT52C2V4S-BZT52C39S

Typical characteristics





TM

Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/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.

Mouser Electronics

Authorized Distributor

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

Micro Commercial Components (MCC):

[BZT52C10S-TP](#) [BZT52C27S-TP](#) [BZT52C7V5S-TP](#) [BZT52C4V7S-TP](#) [BZT52C5V6S-TP](#) [BZT52C20S-TP](#)
[BZT52C22S-TP](#) [BZT52C15S-TP](#) [BZT52C8V2S-TP](#) [BZT52C3V6S-TP](#) [BZT52C2V7S-TP](#) [BZT52C3V0S-TP](#)
[BZT52C6V2S-TP](#) [BZT52C30S-TP](#) [BZT52C16S-TP](#) [BZT52C9V1S-TP](#) [BZT52C13S-TP](#) [BZT52C3V9S-TP](#)
[BZT52C36S-TP](#) [BZT52C12S-TP](#) [BZT52C2V4S-TP](#) [BZT52C39S-TP](#) [BZT52C18S-TP](#) [BZT52C6V8S-TP](#)
[BZT52C4V3S-TP](#) [BZT52C5V1S-TP](#) [BZT52C3V3S-TP](#) [BZT52C11S-TP](#) [BZT52C24S-TP](#) [BZT52C33S-TP](#)