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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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# BZT52C2V4 THRU BZT52C43

## **Features**

- Planar Die Construction
- 500mW 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/ŘoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

# **Absolute Maximum Ratings**

Symbol	Rating	Rating	Unit
P <sub>D</sub>	Power dissipation	500	mW
$T_J$	Junction Temperature	-65 to +150	$^{\circ}\!\mathbb{C}$
T <sub>STG</sub>	Storage Temperature Range	-65 to +150	$^{\circ}\!\mathbb{C}$

# **Absolute Maximum Ratings**

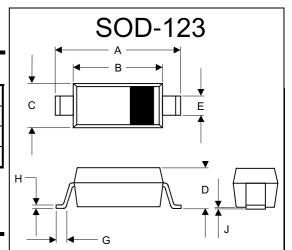
Symbol	Rating	Rating	Unit	
$R_{thJA}$	Thermal Resistance Junction to Ambient*	250	°C/W	

 $<sup>^{\</sup>star}$  Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25  $_{\text{mm}^2}$ 

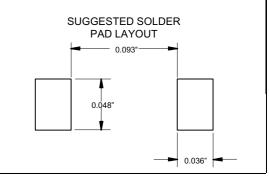
## **Electrical Characteristics**

Symbol	Rating	Rating	Unit	
V <sub>F</sub>	Maximum Forward Voltage (I <sub>F</sub> =10mAdc)	0.9	V	

## 500 mW Zener Diode 2.4 to 43 Volts



DIMENSIONS								
DIM	INC	HES	N	NOTE				
	MIN	MAX	MIN	MAX				
Α	.140	.152	3.55	3.85				
В	.100	.112	2.55	2.85				
С	.055	.071	1.40	1.80				
D		.053		1.35				
Е	.012	.031	0.30	.78				
G	.006		0.15					
Н		.01		.25				
J		.006		.15				





### **ELECTRICAL CHARACTERISTICS @25°C**

**Micro Commercial Components** 

Туре		ENER VOLT Vz <sup>(1)</sup> VOLTS	AGE			Maximur Impeda Z <sub>zk</sub> (O	ance <sup>(2)</sup> HMS)	REVE CURF I <sub>R</sub> (Max)	RENT @ V <sub>R</sub>	Coeff @	erature ficent I <sub>z⊤c</sub>	Marking
	Min.	Nom	Max.	$I_{ZT}(mA)$	Max.	$I_{ZK}(mA)$	Max.	uA	V	m۷	'/°C	
BZT52C2V4	2.28	2.4	2.56	5	100	1.0	600	50	1.0	-3.5	0	WX
BZT52C2V7	2.5	2.7	2.9	5	100	1.0	600	20	1.0	-3.5	0	W1
BZT52C3V0	2.8	3.0	3.2	5	95	1.0	600	10	1.0	-3.5	0	W2
BZT52C3V3	3.1	3.3	3.5	5	95	1.0	600	5	1.0	-3.5	0	W3
BZT52C3V6	3.4	3.6	3.8	5	90	1.0	600	5	1.0	-3.5	0	W4
BZT52C3V9	3.7	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0	W5
BZT52C4V3	4.0	4.3	4.6	5	90	1.0	600	3	1.0	-3.5	0	W6
BZT52C4V7	4.4	4.7	5.0	5	80	1.0	500	3	2.0	-3.5	0.2	W7
BZT52C5V1	4.8	5.1	5.4	5	60	1.0	480	2	2.0	-2.7	1.2	W8
BZT52C5V6	5.2	5.6	6.0	5	40	1.0	400	1	2.0	-2.0	2.5	W9
BZT52C6V2	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7	WA
BZT52C6V8	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5	WB
BZT52C7V5	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3	WC
BZT52C8V2	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2	WD
BZT52C9V1	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0	WE
BZT52C10	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0	WF
BZT52C11	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0	WG
BZT52C12	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0	WH
BZT52C13	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0	WI
BZT52C15	13.8	15	15.6	5	30	1.0	200	0.1	10.5	9.2	13.0	WJ
BZT52C16	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0	WK
BZT52C18	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0	WL
BZT52C20	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0	WM
BZT52C22	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0	WN
BZT52C24	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0	WO
BZT52C27	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3	WP
BZT52C30	28	30	32	2	80	0.5	300	0.1	21.0	24.4	29.4	WQ
BZT52C33	31	33	35	2	80	0.5	325	0.1	23.1	27.4	33.4	WR
BZT52C36	34	36	38	2	90	0.5	350	0.1	25.2	30.4	37.4	WS
BZT52C39	37	39	41	2	130	0.5	350	0.1	27.3	33.4	41.2	WT
BZT52C43	40	43	46	5	100	1.0	700	0.1	32.0	10.0	12.0	WU

<sup>(1)</sup> Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25  $\mbox{mm}^2$  (2) f=1KHz

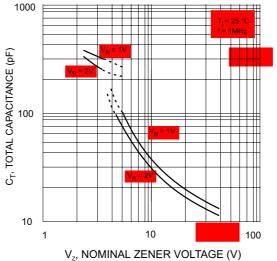
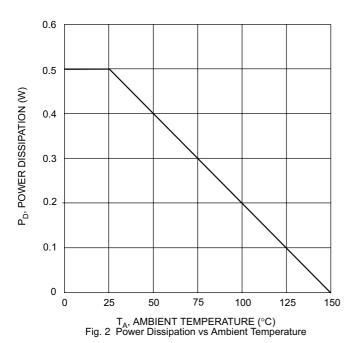
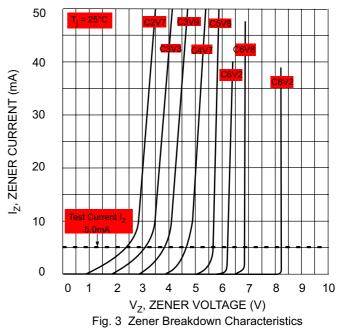


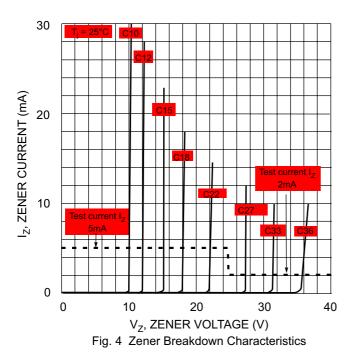
Fig. 1 Total Capacitance vs Nominal Zener Voltage

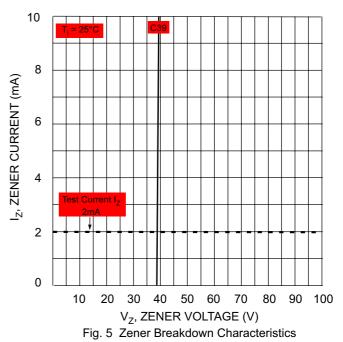
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## **Ordering Information:**

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

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

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