



Micro Commercial Components

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# BZT52C2V4T THRU BZT52C39T

## Features

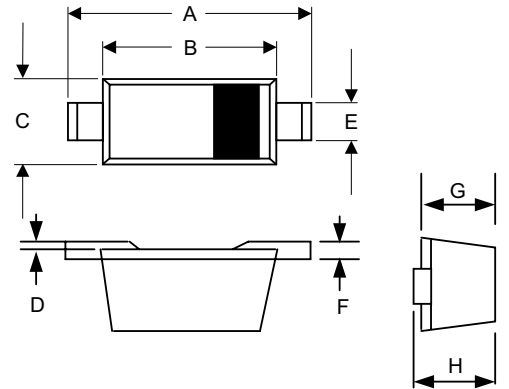
- Planar Die Construction
- 100mW Power Dissipation
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

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

## Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
$P_D$	Power dissipation	100	mW
$T_J$	Junction Temperature	-65 to +175	°C
$T_{STG}$	Storage Temperature Range	-65 to +175	°C

## SOD523



## Absolute Maximum Ratings

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.77	

## Electrical Characteristics

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

**ELECTRICAL CHARACTERISTICS @25°C**

Type	ZENER VOLTAGE $V_Z^{(1)}$ VOLTS			Maximum Zener Impedance <sup>(2)</sup> $Z_{ZT}$ (OHMS)		Maximum Zener Impedance <sup>(2)</sup> $Z_{ZK}$ (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		
BZT52C2V4T	2.28	2.4	2.56	5	100	1.0	600	50	1.0	-3.5	0	Z11
BZT52C2V7T	2.5	2.7	2.9	5	100	1.0	600	20	1.0	-3.5	0	Z12
BZT52C3V0T	2.8	3.0	3.2	5	95	1.0	600	10	1.0	-3.5	0	Z13
BZT52C3V3T	3.1	3.3	3.5	5	95	1.0	600	5	1.0	-3.5	0	Z14
BZT52C3V6T	3.4	3.6	3.8	5	90	1.0	600	5	1.0	-3.5	0	Z15
BZT52C3V9T	3.7	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0	Z16
BZT52C4V3T	4.0	4.3	4.6	5	90	1.0	600	3	1.0	-3.5	0	Z17
BZT52C4V7T	4.4	4.7	5.0	5	80	1.0	500	3	2.0	-3.5	0.2	Z1
BZT52C5V1T	4.8	5.1	5.4	5	60	1.0	480	2	2.0	-2.7	1.2	Z2
BZT52C5V6T	5.2	5.6	6.0	5	40	1.0	400	1	2.0	-2.0	2.5	Z3
BZT52C6V2T	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7	Z4
BZT52C6V8T	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5	Z5
BZT52C7V5T	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3	Z6
BZT52C8V2T	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2	Z7
BZT52C9V1T	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0	Z8
BZT52C10T	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0	Z9
BZT52C11T	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0	Y1
BZT52C12T	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0	Y2
BZT52C13T	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0	Y3
BZT52C15T	13.8	15	15.6	5	30	1.0	200	0.1	10.5	9.2	13.0	Y4
BZT52C16T	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0	Y5
BZT52C18T	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0	Y6
BZT52C20T	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0	Y7
BZT52C22T	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0	Y8
BZT52C24T	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0	Y9
BZT52C27T	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3	Y10
BZT52C30T	28	30	32	2	80	0.5	300	0.1	21.0	24.4	29.4	Y11
BZT52C33T	31	33	35	2	80	0.5	325	0.1	23.1	27.4	33.4	Y12
BZT52C36T	34	36	38	2	90	0.5	350	0.1	25.2	30.4	37.4	Y13
BZT52C39T	37	39	41	2	130	0.5	350	0.1	27.3	33.4	41.2	Y14

(1) Tested with pulses, period = 5ms, pulse width=300us

(2) f=1KHz



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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