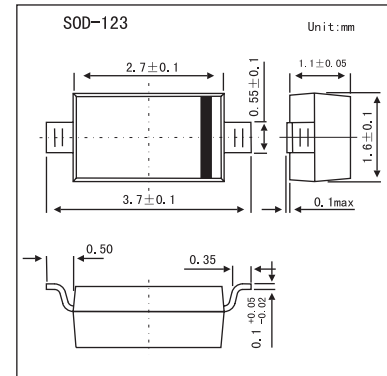


## Surface Mount Zener Diodes

## BZT52C2V0 - BZT52C39

## ■ Features

- Planar Die Construction
- 500mW Power Dissipation on Ceramic PCB
- General Purpose, Medium Current



## ■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Power dissipation	P	500	mW
Thermal Resistance, Junction to Ambient Air	R <sub>θJA</sub>	250	°C/W
Forward Voltage @ I <sub>F</sub> = 10mA	V <sub>F</sub>	0.9	V
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-65 to +150	°C

## ■ Electrical Characteristics (Ta = 25°C)

Type	Zener voltage V <sub>Z</sub> (V)			Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature Coefficient @ I <sub>ZTC</sub> mV/°C		Test Current I <sub>ZTC</sub> mA	Marking	
	Nom.	Min.	Max.	I <sub>Z</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	@ V <sub>R</sub> (V)	Min.			Max.
BZT52C2V0	2.0	1.91	2.09	5	100	600	1.0	150	1.0	-3.5	0	5	WY
BZT52C2V4	2.4	2.2	2.6	5	100	600	1.0	50	1.0	-3.5	0	5	WX
BZT52C2V7	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0	5	W1
BZT52C3V0	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0	5	W2
BZT52C3V3	3.3	3.1	3.5	5	95	600	1.0	5.0	1.0	-3.5	0	5	W3
BZT52C3V6	3.6	3.4	3.8	5	90	600	1.0	5.0	1.0	-3.5	0	5	W4
BZT52C3V9	3.9	3.7	4.1	5	90	600	1.0	3.0	1.0	-3.5	0	5	W5
BZT52C4V3	4.3	4.0	4.6	5	90	600	1.0	3.0	1.0	-3.5	0	5	W6
BZT52C4V7	4.7	4.4	5.0	5	80	500	1.0	3.0	2.0	-3.5	0.2	5	W7
BZT52C5V1	5.1	4.8	5.4	5	60	480	1.0	2.0	2.0	-2.7	1.2	5	W8

## BZT52C2V0 - BZT52C39

Type	Zener voltage V <sub>Z</sub> (V)				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature Coefficient @ I <sub>ZTC</sub> mV/°C		Test Current I <sub>ZTC</sub> mA	Marking
	Nom.	Min.	Max.	I <sub>Z</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	@ V <sub>R</sub> (V)	Min.	Max.		
BZT52C5V6	5.6	5.2	6.0	5	40	400	1.0	1.0	2.0	-2	2.5	5	W9
BZT52C6V2	6.2	5.8	6.6	5	10	150	1.0	3.0	4.0	0.4	3.7	5	WA
BZT52C6V8	6.8	6.4	7.2	5	15	80	1.0	2.0	4.0	1.2	4.5	5	WB
BZT52C7V5	7.5	7.0	7.9	5	15	80	1.0	1.0	5.0	2.5	5.3	5	WC
BZT52C8V2	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5	WD
BZT52C9V1	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5	WE
BZT52C10	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0	5	WF
BZT52C11	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0	5	WG
BZT52C12	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5	WH
BZT52C13	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0	5	WI
BZT52C15	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0	5	WJ
BZT52C16	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0	5	WK
BZT52C18	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0	5	WL
BZT52C20	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0	5	WM
BZT52C22	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0	5	WN
BZT52C24	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0	5	WO
BZT52C27	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2	WP
BZT52C30	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2	WQ
BZT52C33	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2	WR
BZT52C36	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2	WS
BZT52C39	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2	WT