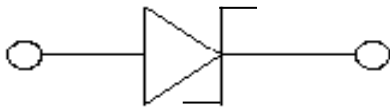


## Zener Diodes



### Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 2.4V~75V



### Mechanical Data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation	P <sub>D</sub>	mW	500
Storage Temperature Range	T <sub>stg</sub>	°C	-55~+150
Junction Temperature	T <sub>J</sub>	°C	-55~+150
Maximum Regulator Current	I <sub>ZM</sub>	mA	P <sub>D</sub> /V <sub>Z</sub>
Maximum Forward Voltage (I <sub>F</sub> =10mA <sub>dc</sub> )	V <sub>F</sub>	V	0.9
Thermal Resistance Junction to Ambient Air*	R <sub>θJA</sub>	°C/W	250

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52C2V4 THRU BZT52C75	F2	Approximate 0.011	3000	30000	120000	7" reel



# BZT52C2V4 THRU BZT52C75

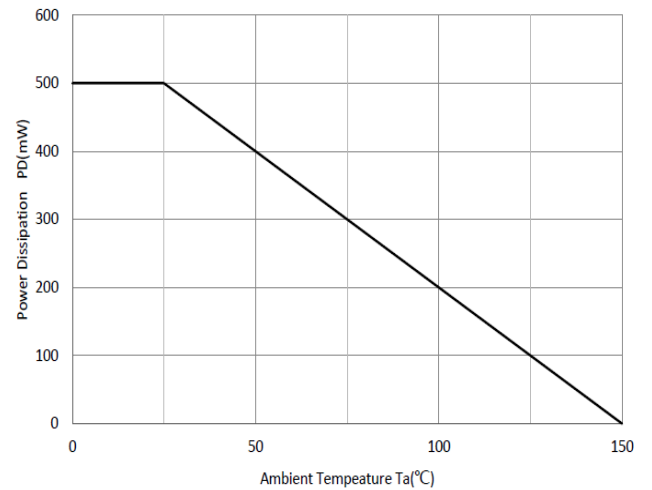
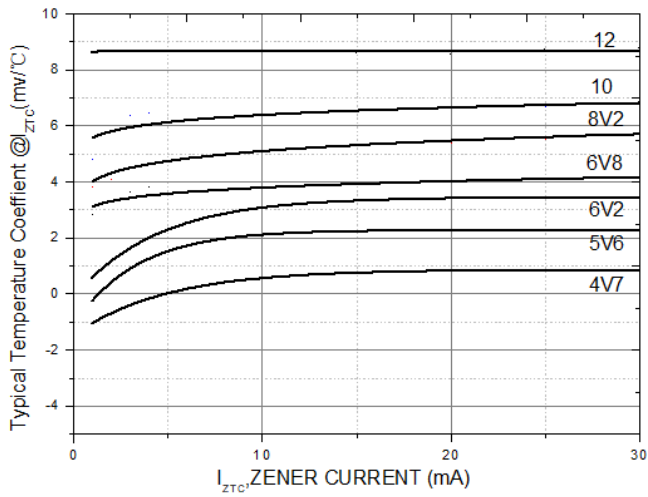
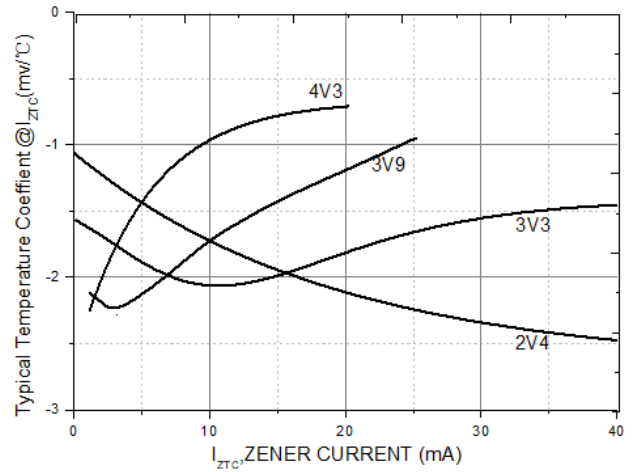
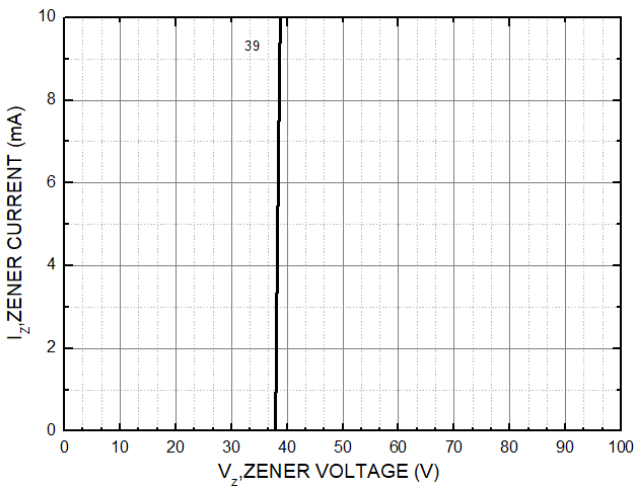
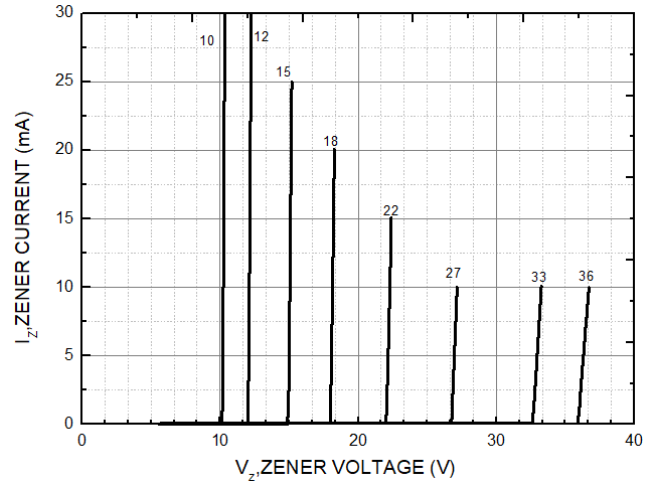
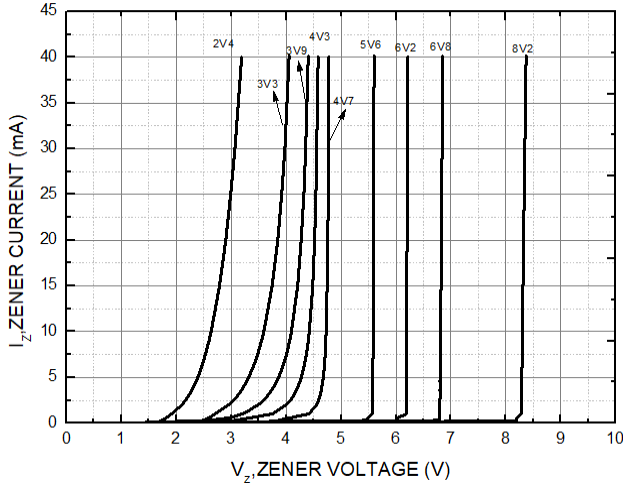
## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type Number	Device Marking	V <sub>z</sub> at I <sub>z</sub> t (V)			I <sub>z</sub> t mA	Z <sub>z</sub> (Ω)		Z <sub>zk</sub> (Ω)		I <sub>R</sub> (μA)@V <sub>R</sub>		Typical Temperature Coefficient@ IZTC mV/°C		Test Current IZTC mA
		min.	typ.	max.		I <sub>z</sub> (mA)	max.	I <sub>zk</sub> (mA)	max.	max	V <sub>R</sub> (V)	Min	Max	
BZT52C2V4	WX	2.28	2.4	2.52	5	5	100	1.0	600	50	1.0	-3.5	0	5
BZT52C2V7	W1	2.57	2.7	2.84	5	5	100	1.0	600	20	1.0	-3.5	0	5
BZT52C3V0	W2	2.85	3.0	3.15	5	5	95	1.0	600	10	1.0	-3.5	0	5
BZT52C3V3	W3	3.14	3.3	3.47	5	5	95	1.0	600	5	1.0	-3.5	0	5
BZT52C3V6	W4	3.42	3.6	3.78	5	5	90	1.0	600	5	1.0	-3.5	0	5
BZT52C3V9	W5	3.71	3.9	4.1	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZT52C4V3	W6	4.09	4.3	4.52	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZT52C4V7	W7	4.47	4.7	4.94	5	5	80	1.0	500	3	2.0	-3.5	0	5
BZT52C5V1	W8	4.85	5.1	5.36	5	5	60	1.0	480	2	2.0	-2.7	1.2	5
BZT52C5V6	W9	5.32	5.6	5.88	5	5	40	1.0	400	1	2.0	-2	2.5	5
BZT52C6V2	WA	5.8	6.2	6.6	5	5	10	1.0	150	3	4.0	0.4	3.7	5
BZT52C6V8	WB	6.4	6.8	7.2	5	5	15	1.0	80	2	4.0	1.2	4.5	5
BZT52C7V5	WC	7.0	7.5	7.9	5	5	15	1.0	80	1	5.0	2.5	5.3	5
BZT52C8V2	WD	7.7	8.2	8.7	5	5	15	1.0	80	0.7	5.0	3.2	6.2	5
BZT52C9V1	WE	8.5	9.1	9.6	5	5	15	1.0	100	0.5	6.0	3.8	7.0	5
BZT52C10	WF	9.4	10	10.6	5	5	20	1.0	150	0.2	7.0	4.5	8.0	5
BZT52C11	WG	10.4	11	11.6	5	5	20	1.0	150	0.1	8.0	5.4	9.0	5
BZT52C12	WH	11.4	12	12.7	5	5	25	1.0	150	0.1	8.0	6.0	10.0	5
BZT52C13	WI	12.4	13	14.1	5	5	30	1.0	170	0.1	8.0	7.0	11.0	5
BZT52C15	WJ	14.25	15	15.6	5	5	30	1.0	200	0.1	10.5	9.2	13.0	5
BZT52C16	WK	15.3	16	17.1	5	5	40	1.0	200	0.1	11.2	10.4	14.0	5
BZT52C18	WL	16.8	18	19.1	5	5	45	1.0	225	0.1	12.6	12.4	16.0	5
BZT52C20	WM	18.8	20	21.2	5	5	55	1.0	225	0.1	14.0	14.4	18.0	5
BZT52C22	WN	20.8	22	23.3	5	5	55	1.0	250	0.1	15.4	16.4	20.0	5
BZT52C24	WO	22.8	24	25.6	5	5	70	1.0	250	0.1	16.8	18.4	22.0	5
BZT52C27	WP	25.1	27	28.9	2	2	80	0.5	300	0.1	18.9	21.4	25.3	2
BZT52C30	WQ	28	30	32	2	2	80	0.5	300	0.1	21.0	24.4	29.4	2
BZT52C33	WR	31	33	35	2	2	80	0.5	325	0.1	23.1	27.4	33.4	2
BZT52C36	WS	34	36	38	2	2	90	0.5	350	0.1	25.2	30.4	37.4	2
BZT52C39	WT	37	39	41	2	2	130	0.5	350	0.1	27.3	33.4	41.2	2
BZT52C43	WU	40	43	46	5	5	100	1.0	750	0.1	32	37.6	46.6	2
BZT52C47	WV	44	47	50	5	5	100	1.0	750	0.1	35	42.0	51.8	2
BZT52C51	WW	48	51	54	2	2	180	0.5	400	0.05	35.7	46.6	57.2	2
BZT52C56	X1	53	56	59	2	2	200	1	1000	0.1	42	52.2	63.8	2
BZT52C62	5X2	58	62	66	2	2	215	0.5	450	0.05	43.4	58.8	71.6	2
BZT52C68	5X3	64	68	72	2	2	240	0.5	475	0.05	47.6	65.6	79.8	2
BZT52C75	5X4	70	75	79	2	2	255	0.5	500	0.05	52.5	73.4	88.6	2



# BZT52C2V4 THRU BZT52C75

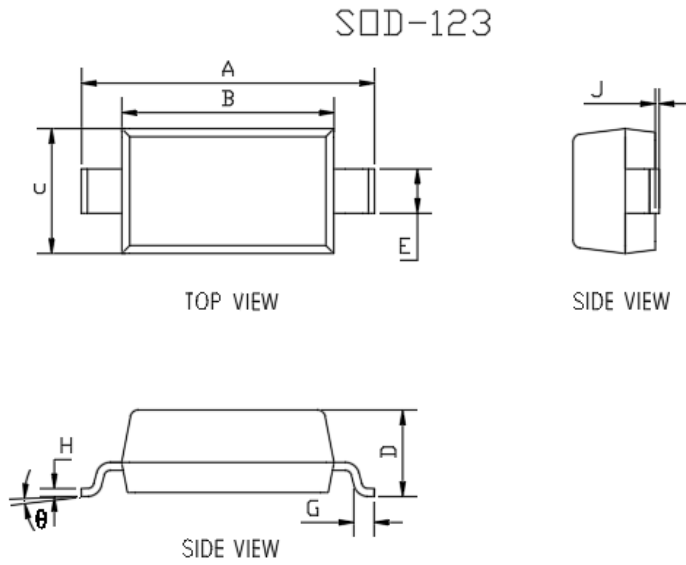
## ■ Characteristics (Typical)





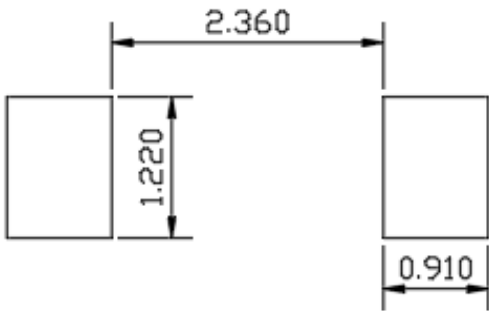
# BZT52C2V4 THRU BZT52C75

## ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
$\theta$	0	8°	0	8°

## ■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



## BZT52C2V4 THRU BZT52C75

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