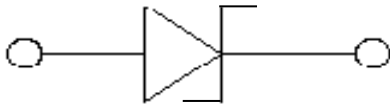


## Zener Diodes



### Features

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



### Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation (*Note)	$P_D$	mW	300
Storage Temperature Range	$T_{stg}$	$^\circ\text{C}$	-55~+150
Junction Temperature	$T_J$	$^\circ\text{C}$	-55~+150
Maximum Regulator Current	$I_{ZM}$	mA	$P_D / V_Z$
Maximum Forward Voltage ( $I_F=10\text{mA}$ )	$V_F$	V	0.9
Thermal Resistance Junction to Ambient Air(*Note)	$R_{\theta JA}$	$^\circ\text{C} / \text{W}$	417

Note: Device mounted on PCB

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52C2V4S THRU BZT52C75S	F2	Approximate 0.0048	3000	30000	120000	7" reel



# BZT52C2V4S THRU BZT52C75S

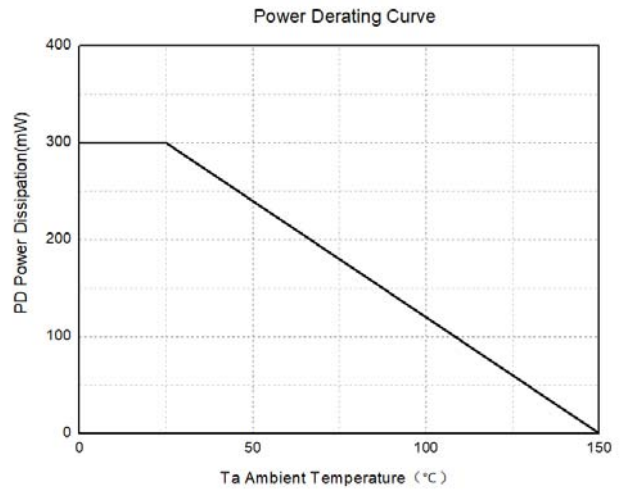
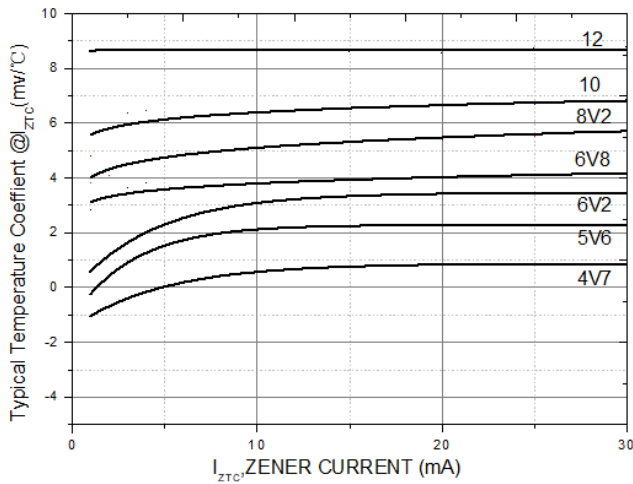
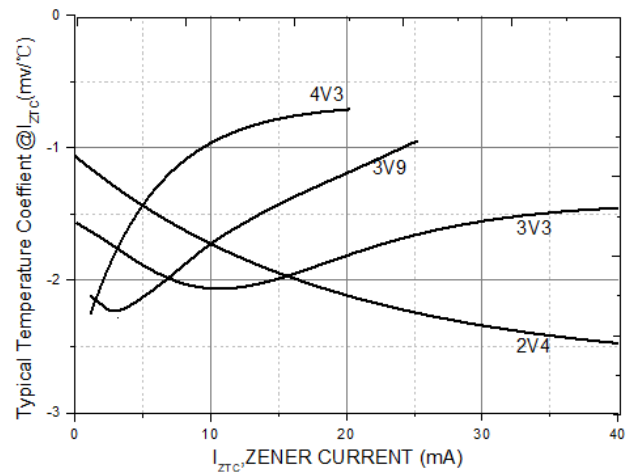
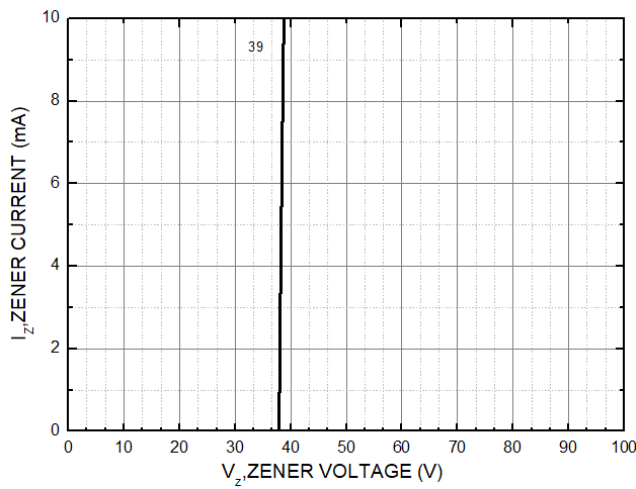
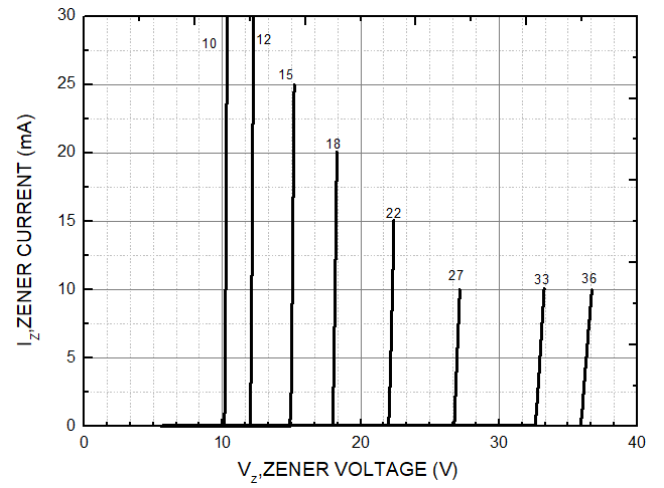
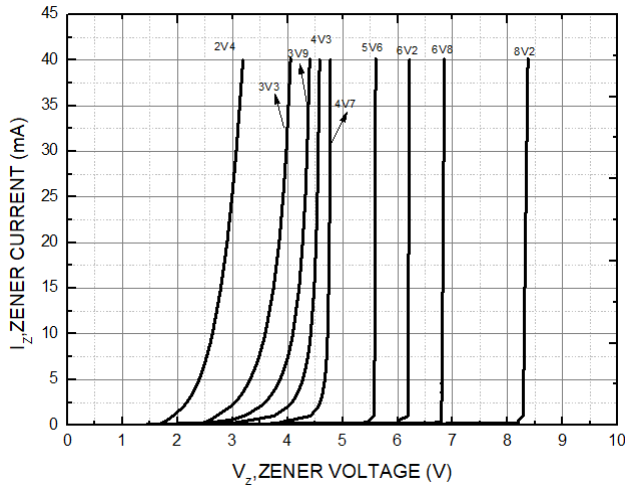
## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type Number	Device Marking	V <sub>z</sub> at I <sub>zT</sub> (V)			Z <sub>zT</sub> (Ω)		Z <sub>zk</sub> (Ω)		I <sub>R</sub> (μA)@V <sub>R</sub>		Typical Temperature Coefficient @I <sub>zTC</sub>	
		min.	typ.	max.	I <sub>zT</sub> (mA)	max.	I <sub>zk</sub> (mA)	max.	max	V <sub>R</sub> (V)	mV/°C	
BZT52C2V4S	WX	2.28	2.4	2.52	5	100	1.0	600	50	1.0	-3.5	0
BZT52C2V7S	W1	2.57	2.7	2.84	5	100	1.0	600	20	1.0	-3.5	0
BZT52C3V0S	W2	2.85	3.0	3.15	5	95	1.0	600	10	1.0	-3.5	0
BZT52C3V3S	W3	3.14	3.3	3.47	5	95	1.0	600	5	1.0	-3.5	0
BZT52C3V6S	W4	3.42	3.6	3.78	5	90	1.0	600	5	1.0	-3.5	0
BZT52C3V9S	W5	3.71	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0
BZT52C4V3S	W6	4.09	4.3	4.52	5	90	1.0	600	3	1.0	-3.5	0
BZT52C4V7S	W7	4.47	4.7	4.94	5	80	1.0	500	3	2.0	-3.5	0.2
BZT52C5V1S	W8	4.85	5.1	5.36	5	60	1.0	480	2	2.0	-2.7	1.2
BZT52C5V6S	W9	5.32	5.6	5.88	5	40	1.0	400	1	2.0	-2.0	2.5
BZT52C6V2S	WA	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7
BZT52C6V8S	WB	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5
BZT52C7V5S	WC	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3
BZT52C8V2S	WD	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2
BZT52C9V1S	WE	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0
BZT52C10S	WF	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0
BZT52C11S	WG	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0
BZT52C12S	WH	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0
BZT52C13S	WI	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0
BZT52C15S	WJ	14.25	15	15.6	5	30	1.0	200	0.1	10.5	9.2	13.0
BZT52C16S	WK	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0
BZT52C18S	WL	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0
BZT52C20S	WM	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0
BZT52C22S	WN	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0
BZT52C24S	WO	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0
BZT52C27S	WP	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3
BZT52C30S	WQ	28	30	32	2	80	0.5	300	0.1	21.0	24.4	29.4
BZT52C33S	WR	31	33	35	2	80	0.5	325	0.1	23.1	27.4	33.4
BZT52C36S	WS	34	36	38	2	90	0.5	350	0.1	25.2	30.4	37.4
BZT52C39S	WT	37	39	41	2	130	0.5	350	0.1	27.3	33.4	41.2
BZT52C43S	WU	40	43	46	5	100	1.0	750	0.1	32	37.6	46.6
BZT52C47S	WV	44	47	50	5	100	1.0	750	0.1	35	42.0	51.8
BZT52C51S	X1	48	51	54	2	180	0.5	400	0.05	35.7	46.6	57.2
BZT52C56S	X2	53	56	59	2	200	1	1000	0.1	42	52.2	63.8
BZT52C62S	X3	58	62	66	2	215	0.5	450	0.05	43.4	58.8	71.6
BZT52C68S	X4	64	68	72	2	240	0.5	475	0.05	47.6	65.6	79.8
BZT52C75S	X5	70	75	79	2	255	0.5	500	0.05	52.5	73.4	88.6



# BZT52C2V4S THRU BZT52C75S

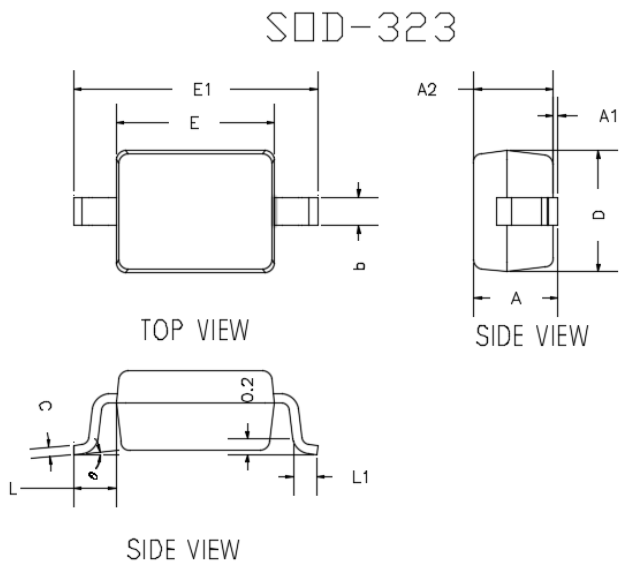
## ■ Characteristics (Typical)





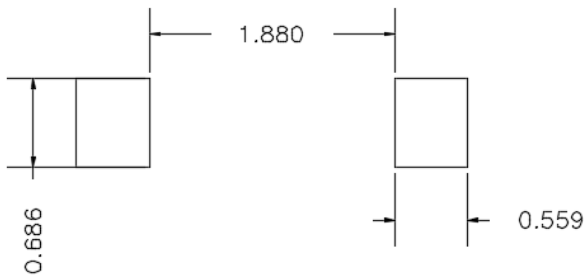
# BZT52C2V4S THRU BZT52C75S

## ■Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

## ■Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



## BZT52C2V4S THRU BZT52C75S

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