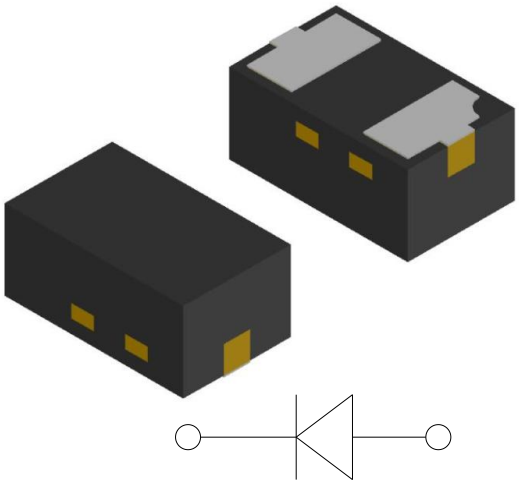
Zener Diodes



Features

- Moisture sensitivity level 3
- Zener voltage 3.6V~36V

Application

- Linear voltage regulator
- DC regulator
- Small-signal surge protection

Mechanical data

- **Package**: DFN1006-2L
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward Voltage	V_F	V	I_F=10mA	1
Maximum Regulator Current	I_{ZM}	mA		P_D/ V_z
Power dissipation	P_D	mW		100
Junction temperature	T_j	℃		150
Storage temperature range	T_{stg}	℃		-55 ~+150

■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(mg)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52B3V6L3P THRU BZT52B36L3P	Approximate 0.9	10K	100K	400K	Tape & Reel

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Type Number	Device Marking	V_z at Izt (V)			Z_{zt}(Ω)		Z_{zk}(Ω)		I_R(μA)@V_R		Diode capacitance Cd (pF)	Non-repetitive peak reverse current Izsm (A)
		min.	typ.	max.	I_{ZT}(mA)	max.	I_{zk}(mA)	max.	max	V_R(V)	max	max
BZT52B3V6L3P	2W4	3.53	3.6	3.67	5	95	1.0	600	15	1.0	450	4.5
BZT52B3V9L3P	2W5	3.82	3.9	3.98	5	95	1.0	600	10	1.0	450	4.5
BZT52B4V3L3P	2W6	4.21	4.3	4.39	5	95	1.0	600	5	1.0	450	3.5
BZT52B4V7L3P	2W7	4.61	4.7	4.79	5	78	1.0	500	1	1.0	300	3.5
BZT52B5V1L3P	2W8	5.0	5.1	5.2	5	60	1.0	480	0.1	0.8	300	3
BZT52B5V6L3P	2W9	5.49	5.6	5.71	5	40	1.0	400	0.1	1.0	200	3
BZT52B6V2L3P	2WA	6.08	6.2	6.32	5	10	1.0	150	0.1	2.0	200	3
BZT52B6V8L3P	2WB	6.66	6.8	6.94	5	8	1.0	80	0.1	3.0	200	2
BZT52B7V5L3P	2WC	7.35	7.5	7.65	5	7	1.0	80	0.1	5.0	150	2
BZT52B8V2L3P	2WD	8.04	8.2	8.36	5	7	1.0	80	0.1	6.0	150	2
BZT52B9V1L3P	2WE	8.92	9.1	9.28	5	10	1.0	100	0.1	6.8	150	1.8
BZT52B10L3P	2WF	9.8	10	10.2	5	15	1.0	150	0.1	7.5	90	1.8
BZT52B11L3P	2WG	10.78	11	11.22	5	20	1.0	150	0.1	8.2	85	1.8
BZT52B12L3P	2WH	11.76	12	12.24	5	20	1.0	150	0.1	9.0	85	1.8
BZT52B13L3P	2WI	12.74	13	13.26	5	26	1.0	170	0.1	9.7	80	1
BZT52B15L3P	2WJ	14.7	15	15.3	5	30	1.0	200	0.1	11.0	75	1
BZT52B16L3P	2WK	15.68	16	16.32	5	40	1.0	200	0.1	12	75	1
BZT52B18L3P	2WL	17.64	18	18.36	5	50	1.0	225	0.1	14.0	70	1
BZT52B20L3P	2WM	19.6	20	20.4	5	55	1.0	225	0.1	15.0	60	1
BZT52B22L3P	2WN	21.56	22	22.44	5	55	1.0	250	0.1	17.0	60	0.6
BZT52B24L3P	2WO	23.52	24	24.48	5	70	1.0	250	0.1	18.0	55	0.6
BZT52B27L3P	2WP	26.46	27	27.54	5	80	1.0	300	0.1	20.0	50	0.6
BZT52B30L3P	2WQ	29.4	30	30.6	5	80	1.0	300	0.1	22	50	0.6
BZT52B33L3P	2WR	32.34	33	33.66	5	80	1.0	325	0.1	24.0	45	0.6
BZT52B36L3P	2WS	35.28	36	36.72	5	90	1.0	350	0.1	27.0	45	0.6

■ Characteristics (Typical)

Fig 1：P_D-Ta Curve

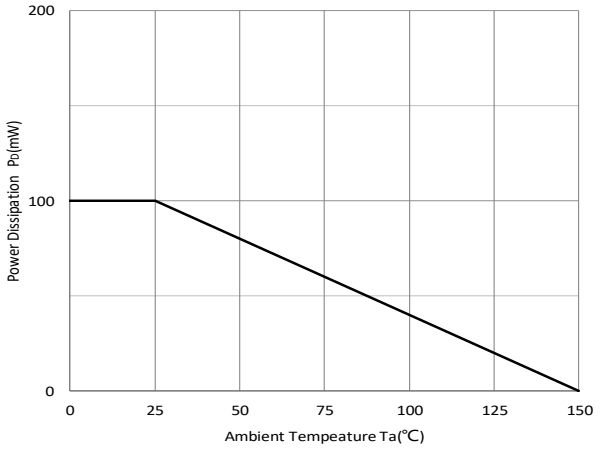


Fig 2：Zener Breakdown Characteristics

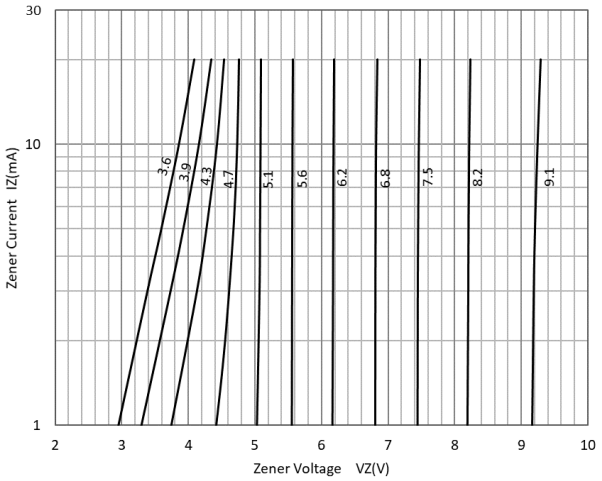


Fig 3：Zener Breakdown Characteristics

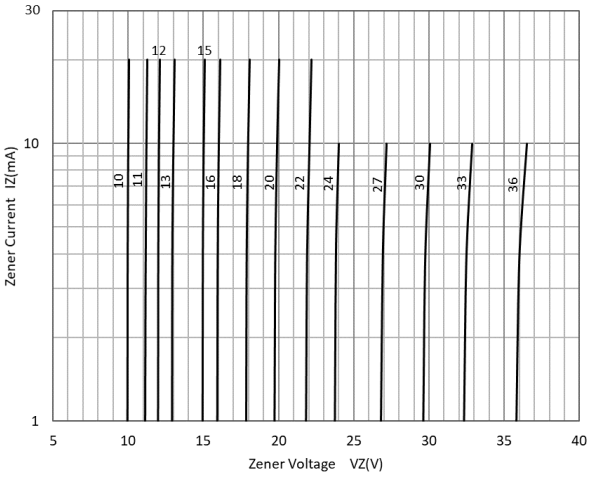


Fig 4：Typical Temperature Coeffient

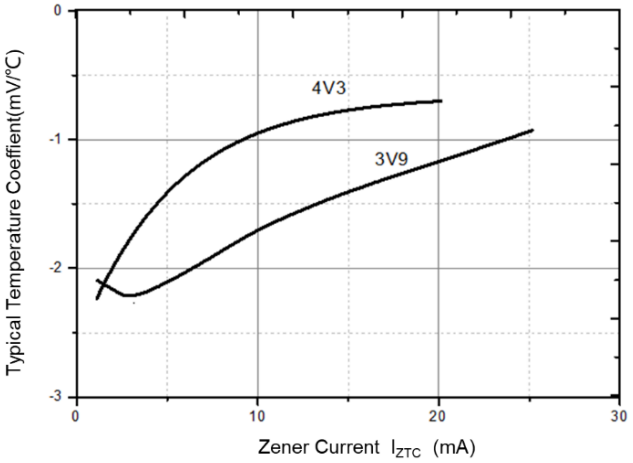


Fig 5：Typical Temperature Coeffient

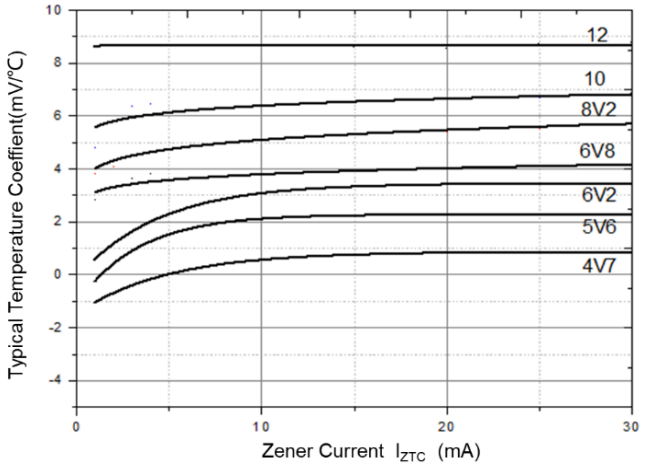


Fig 6：Typical Temperature Coeffient

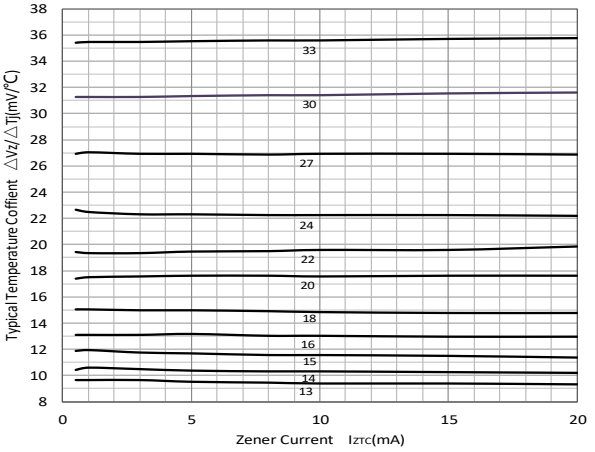


Fig 7：Typical Reverse Current

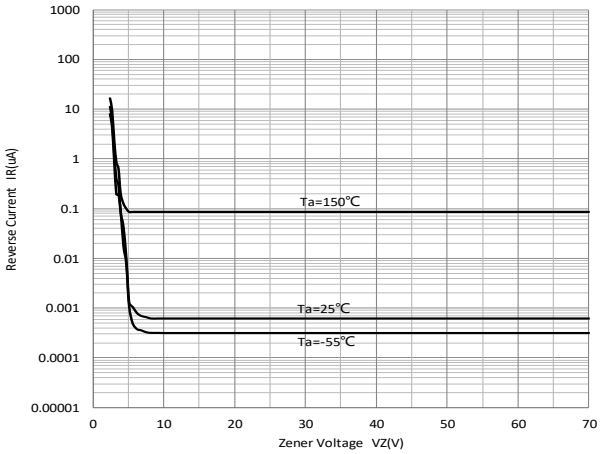


Fig 8：Typical Capacitance

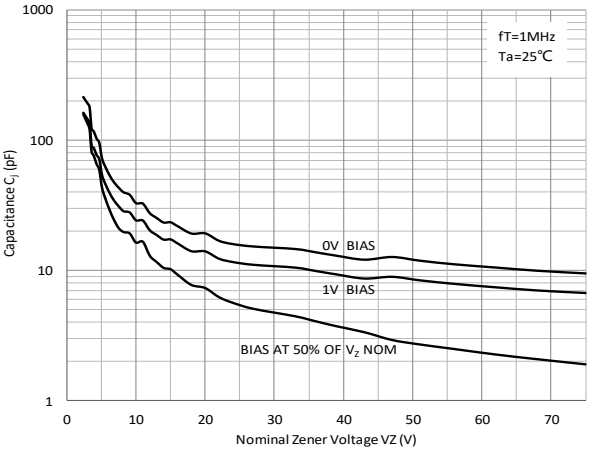
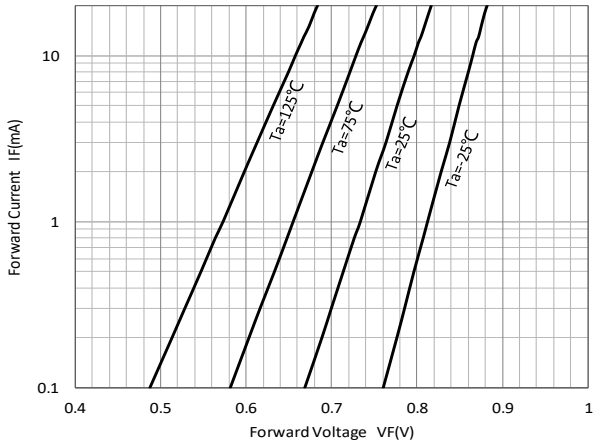
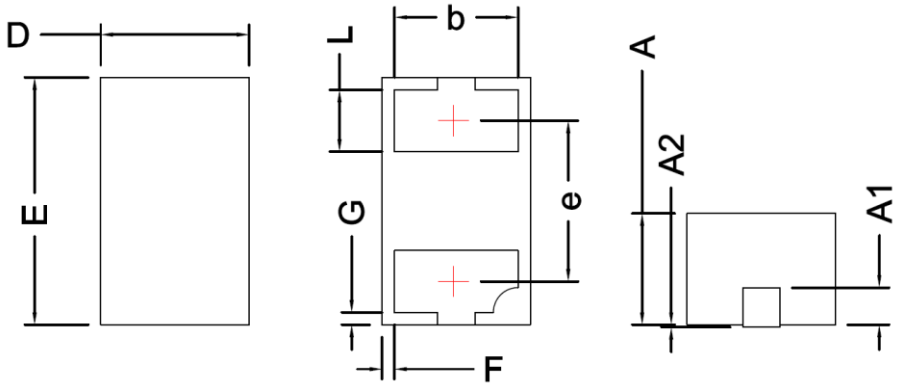


Fig 9：Typical Forward Voltage

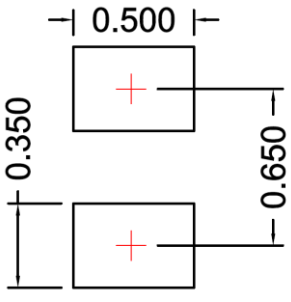


■Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1		0.15 BSC	
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e		0.65 BSC	

■ Soldering Footprint



Unit：mm

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