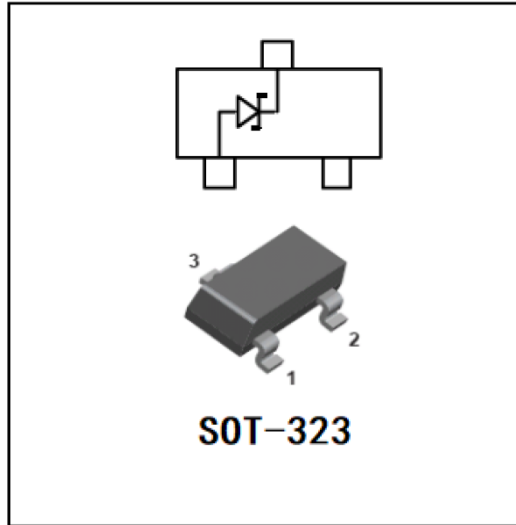


Zener Diodes



Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 2.4V~39V

Mechanical Data

- **Package:** SOT-323
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■Limiting Values (Absolute Maximum Rating, Ta=25°C Unless otherwise specified)

Characteristic	Symbol	Value	Units
Maximum Forward Voltage @I _F =10mA	V _F	0.9	V
Power Dissipation	P _D	200	mW
Peak Forward Surge Current*	I _{FSM}	2.0	A
Thermal Resistance	R _{thJA}	625	°C /W
Operation Temperature	T _J	-55~+150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZX84B2V4W THRU BZX84B36W	F2	Approximate 0.005	3000	30000	120000	7" reel



BZX84B2V4W THRU BZX84B36W

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

Type Number	Marking Code	Nominal Zener Voltage			Maximum Zener Impedance				Max Reverse Leakage Current	
		V _z (V) at I _{zt} =5mA			Z _{zt} (Ω)@I _{zt}		Z _{zk} (Ω)@I _{zk}		I _R (uA) @ V _R	
		Min.	Typ.	Max.	Max	I _{zt} (mA)	Max	I _{zk} (mA)	Max	V _R (V)
BZX84B2V4W	2WX	2.34	2.4	2.46	100	5	600	1	50	1
BZX84B2V7W	2W1	2.63	2.7	2.77	100	5	600	1	20	1
BZX84B3V0W	2W2	2.92	3.0	3.08	100	5	600	1	10	1
BZX84B3V3W	2W3	3.21	3.3	3.39	95	5	600	1	5	1
BZX84B3V6W	2W4	3.52	3.6	3.67	95	5	600	1	5	1
BZX84B3V9W	2W5	3.82	3.9	3.98	95	5	600	1	3	1
BZX84B4V3W	2W6	4.21	4.3	4.39	95	5	600	1	3	1
BZX84B4V7W	2W7	4.61	4.7	4.79	80	5	500	1	3	2
BZX84B5V1W	2W8	5.0	5.1	5.2	60	5	480	1	2	2
BZX84B5V6W	2W9	5.49	5.6	5.71	40	5	400	1	1	2
BZX84B6V2W	2WA	6.08	6.2	6.32	10	5	150	1	3	4
BZX84B6V8W	2WB	6.66	6.8	6.94	15	5	80	1	2	4
BZX84B7V5W	2WC	7.35	7.5	7.65	15	5	80	1	1	5
BZX84B8V2W	2WD	8.04	8.2	8.36	15	5	80	1	0.7	5
BZX84B9V1W	2WE	8.92	9.1	9.28	15	5	100	1	0.5	6
BZX84B10W	WG	9.8	10	10.2	20	5	150	1	0.2	7
BZX84B11W	2WG	10.78	11	11.22	20	5	150	1	0.1	8
BZX84B12W	WI	11.76	12	12.24	25	5	150	1	0.1	8
BZX84B13W	2WI	12.74	13	13.3	30	5	170	1	0.1	8
BZX84B15W	WL	14.7	15	15.3	30	5	200	1	0.1	10.5
BZX84B16W	WM	15.68	16	16.3	40	5	200	1	0.1	11.2
BZX84B18W	WN	17.6	18	18.4	45	5	225	1	0.1	12.6
BZX84B20W	2WM	19.6	20	20.4	55	5	225	1	0.1	14
BZX84B22W	2WN	21.56	22	22.44	55	5	250	1	0.1	15.4
BZX84B24W	WR	23.52	24	24.5	70	5	250	1	0.1	16.8
BZX84B27W	2WP	26.46	27	27.54	80	5	300	1	0.1	18.9
BZX84B30W	2WQ	29.4	30	30.6	80	5	300	1	0.1	21
BZX84B33W	2WR	32.34	33	33.7	80	5	325	1	0.1	23.1
BZX84B36W	2WS	35.28	36	36.72	90	5	350	1	0.1	25.2



BZX84B2V4W THRU BZX84B36W

■ Characteristics (Typical)

Fig 1: P_D - T_a Curve

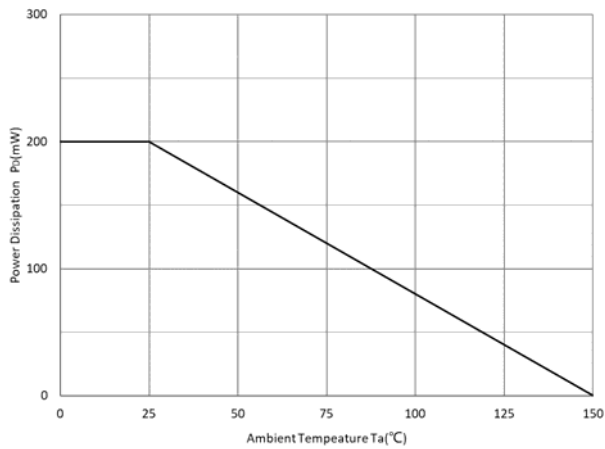


Fig 2: Zener Breakdown Characteristics

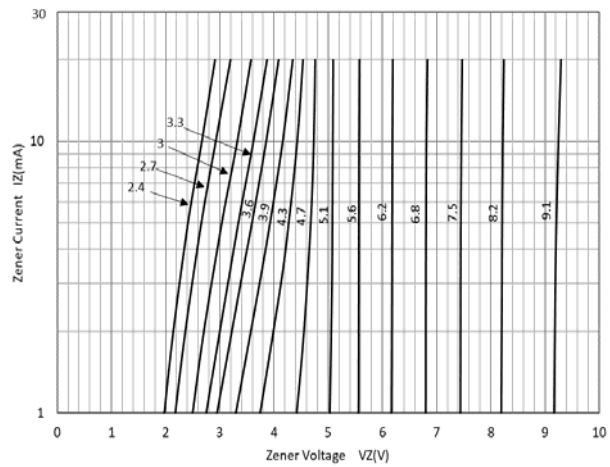


Fig 3: Zener Breakdown Characteristics

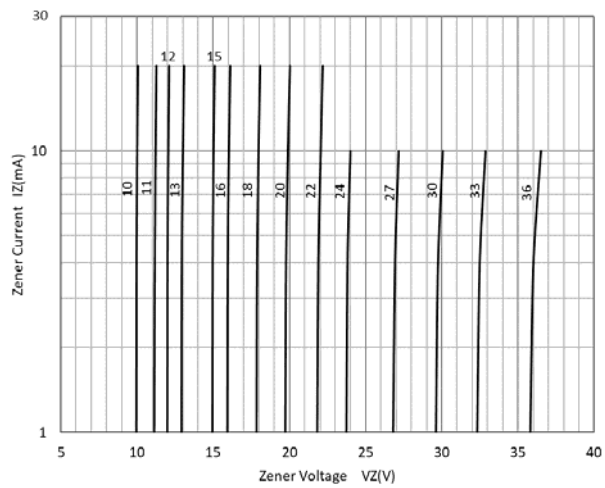


Fig 4: Typical Temperature Coefficient

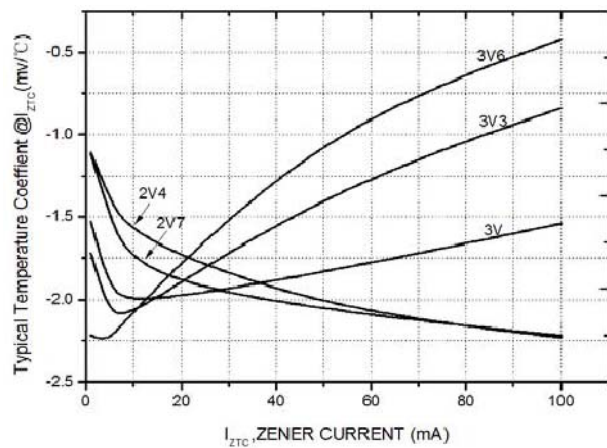


Fig 5: Typical Temperature Coefficient

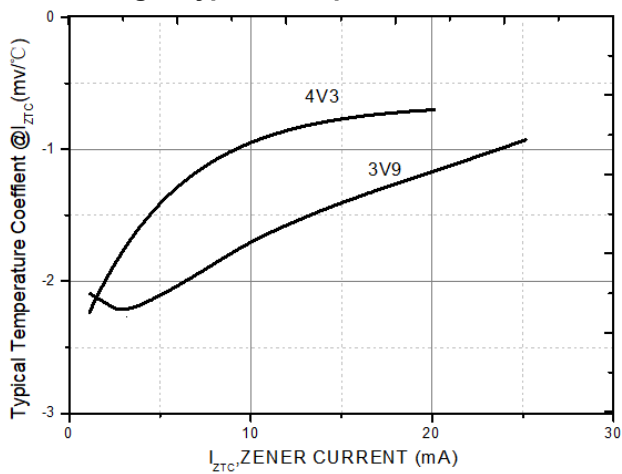
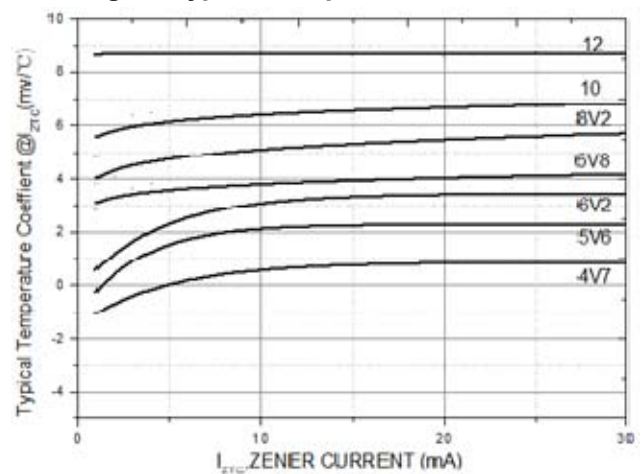


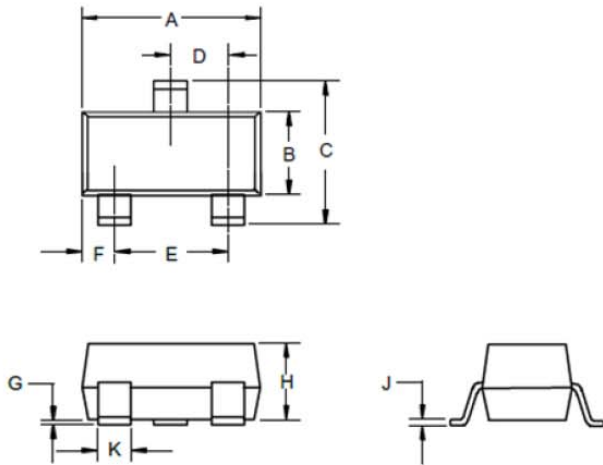
Fig 6: Typical Temperature Coefficient





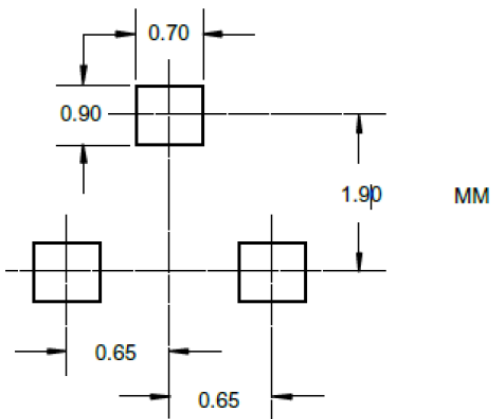
BZX84B2V4W THRU BZX84B36W

■SOT-323 Package Outline Dimensions



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

■SOT-323 Suggested Pad Layout





BZX84B2V4W THRU BZX84B36W

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