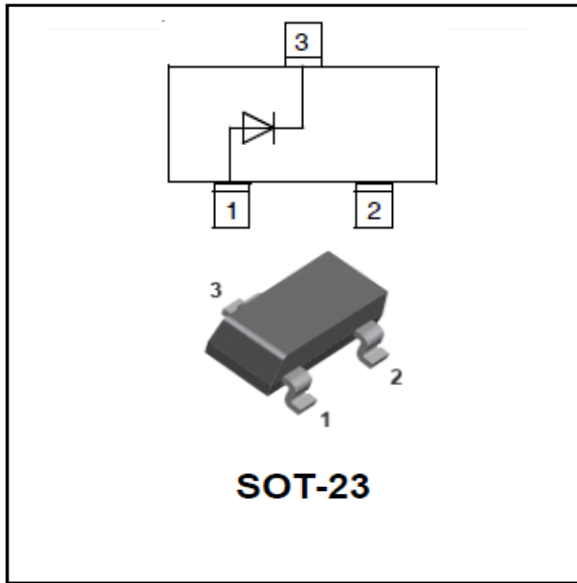


## Zener Diodes



### Features

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

### Mechanical Data

- **Package:** SOT-23  
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 <sub>F</sub> =10mA	V <sub>F</sub>	0.9	V
Power Dissipation	P <sub>D</sub>	350	mW
Peak Forward Surge Current*	I <sub>FSM</sub>	2.0	A
Thermal Resistance	R <sub>thJA</sub>	357	°C /W
Operation Temperature	T <sub>J</sub>	-55~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

\*Measured on 8.3ms, single half sine-wave

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZX84C2V4 THRU BZX84C75	F2	Approximate 0.008	3000	30000	120000	7" reel



# BZX84C2V4 THRU BZX84C75

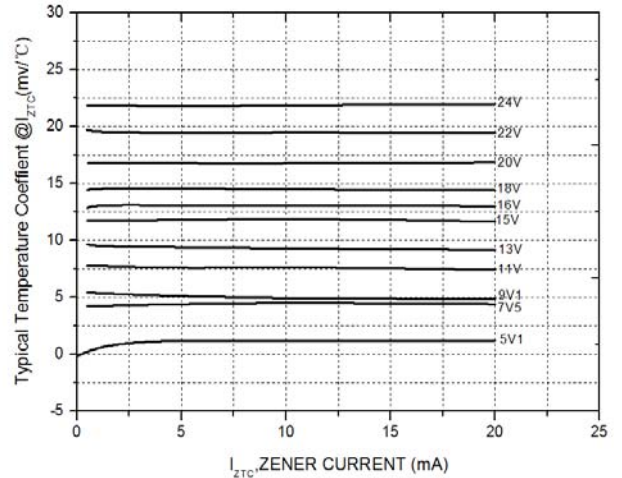
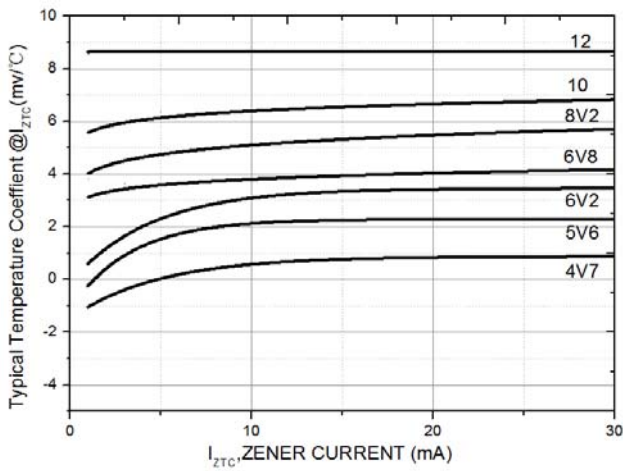
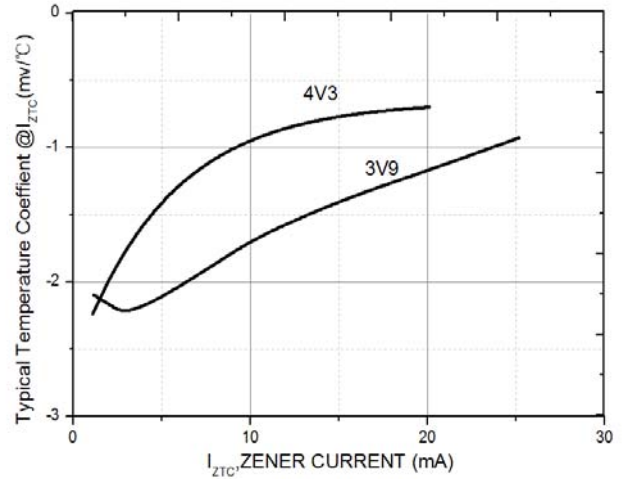
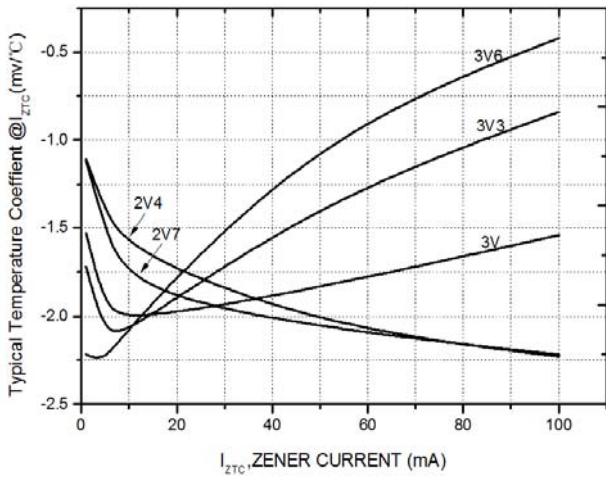
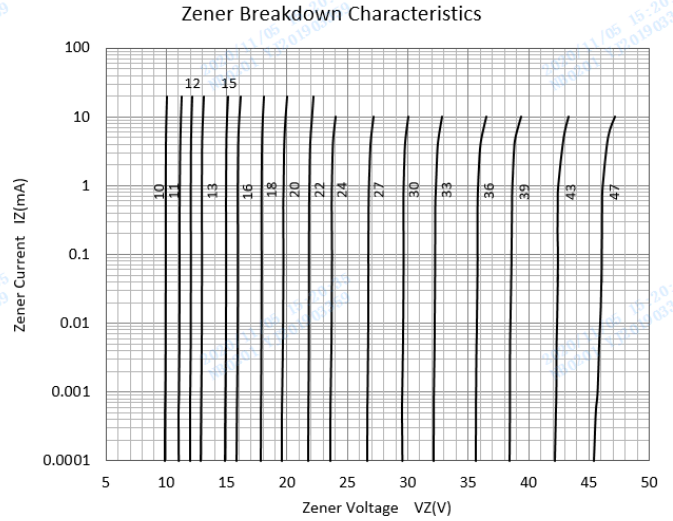
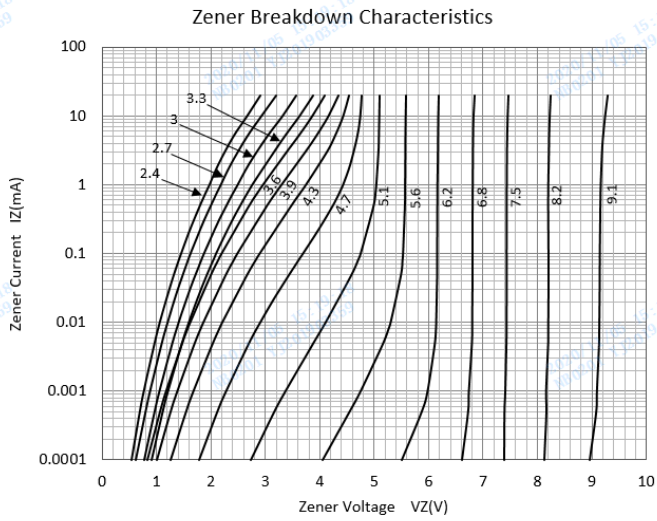
## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type Number	Marking Code	Nominal Zener Voltage			Maximum Zener Impedance				Max Reverse Leakage Current		Typical Temperature Coefficient@ IZTC mV/°C	
		V <sub>Z</sub> at I <sub>ZT</sub> (V)			Z <sub>ZT</sub> @I <sub>ZT</sub>		Z <sub>ZK</sub> @I <sub>ZK</sub>		I <sub>R</sub> (uA)@ V <sub>R</sub>			
		Min.	Typ.	Max.	Z <sub>ZT</sub> (Ω)	I <sub>ZT</sub> (mA)	Z <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	Max	V <sub>R</sub> (V)	Min	Max
BZX84C2V4	Z11.	2.28	2.4	2.52	100	5	600	1	50	1	-3.5	0
BZX84C2V7	Z12.	2.5	2.7	2.9	100	5	600	1	20	1	-3.5	0
BZX84C3V0	Z13.	2.8	3.0	3.2	95	5	600	1	10	1	-3.5	0
BZX84C3V3	Z14.	3.1	3.3	3.5	95	5	600	1	5	1	-3.5	0
BZX84C3V6	Z15.	3.4	3.6	3.8	90	5	600	1	5	1	-3.5	0
BZX84C3V9	Z16.	3.7	3.9	4.1	90	5	600	1	3	1	-3.5	0
BZX84C4V3	Z17.	4.0	4.3	4.6	90	5	600	1	3	1	-3.5	0
BZX84C4V7	Z1.	4.4	4.7	5.0	80	5	500	1	3	2	-3.5	0
BZX84C5V1	Z2.	4.8	5.1	5.4	60	5	480	1	2	2	-2.7	1.2
BZX84C5V6	Z3.	5.2	5.6	6.0	40	5	400	1	1	2	-2	2.5
BZX84C6V2	Z4.	5.8	6.2	6.6	10	5	150	1	3	4	0.4	3.7
BZX84C6V8	Z5.	6.4	6.8	7.2	15	5	80	1	2	4	1.2	4.5
BZX84C7V5	Z6.	7.0	7.5	7.9	15	5	80	1	1	5	2.5	5.3
BZX84C8V2	Z7.	7.7	8.2	8.7	15	5	80	1	0.7	5	3.2	6.2
BZX84C9V1	Z8.	8.5	9.1	9.6	15	5	100	1	0.5	6	3.8	7.0
BZX84C10	Z9.	9.4	10	10.6	20	5	150	1	0.2	7	4.5	8.0
BZX84C11	Y1.	10.4	11	11.6	20	5	150	1	0.1	8	5.4	9.0
BZX84C12	Y2.	11.4	12	12.7	25	5	150	1	0.1	8	6.0	10.0
BZX84C13	Y3.	12.4	13	14.1	30	5	170	1	0.1	8	7.0	11.0
BZX84C15	Y4.	14.25	15	15.75	30	5	200	1	0.1	10.5	9.2	13.0
BZX84C16	Y5.	15.3	16	17.1	40	5	200	1	0.1	11.2	10.4	14.0
BZX84C18	Y6.	16.8	18	19.1	45	5	225	1	0.1	12.6	12.4	16.0
BZX84C20	Y7.	18.8	20	21.2	55	5	225	1	0.1	14	14.4	18.0
BZX84C22	Y8.	20.8	22	23.3	55	5	250	1	0.1	15.4	16.4	20.0
BZX84C24	Y9.	22.8	24	25.6	70	5	250	1	0.1	16.8	18.4	22.0
BZX84C27	Y10.	25.1	27	28.9	80	2	300	1	0.1	18.9	21.4	25.3
BZX84C30	Y11.	28	30	32	80	2	300	1	0.1	21.0	24.4	29.4
BZX84C33	Y12.	31	33	35	80	2	325	1	0.1	23.1	27.4	33.4
BZX84C36	Y13.	34	36	38	90	2	350	1	0.1	25.2	30.4	37.4
BZX84C39	Y14.	37	39	41	130	2	350	1	0.1	27.3	33.4	41.2
BZX84C43	Y15.	40.85	43	45.15	150	5	375	1	0.1	30.1	37.6	46.6
BZX84C47	Y16.	44.65	47	49.35	170	5	375	1	0.1	32.9	42.0	51.8
BZX84C51	Y17.	48	51	54	180	2	400	0.5	0.05	35.7	46.6	57.2
BZX84C56	Y18.	53	56	59	200	2	425	0.5	0.05	39.2	52.2	63.8
BZX84C62	Y19.	58	62	66	215	2	450	0.5	0.05	43.4	58.8	71.6
BZX84C68	Y20.	64	68	72	240	2	475	0.5	0.05	47.6	65.6	79.8
BZX84C75	Y21.	70	75	79	255	2	500	0.5	0.05	52.5	73.4	88.6



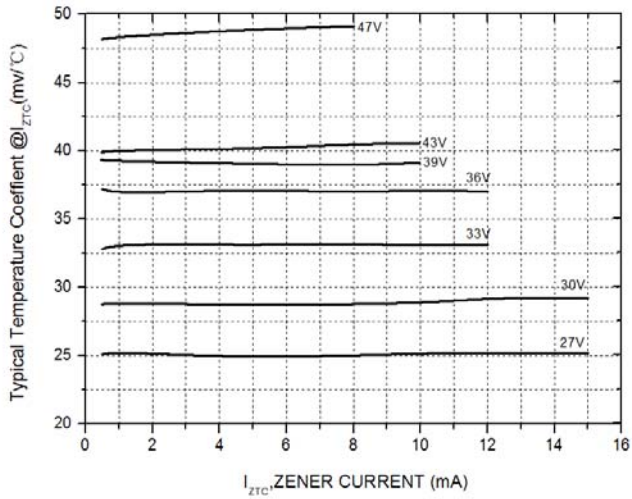
# BZX84C2V4 THRU BZX84C75

## ■ Characteristics (Typical)

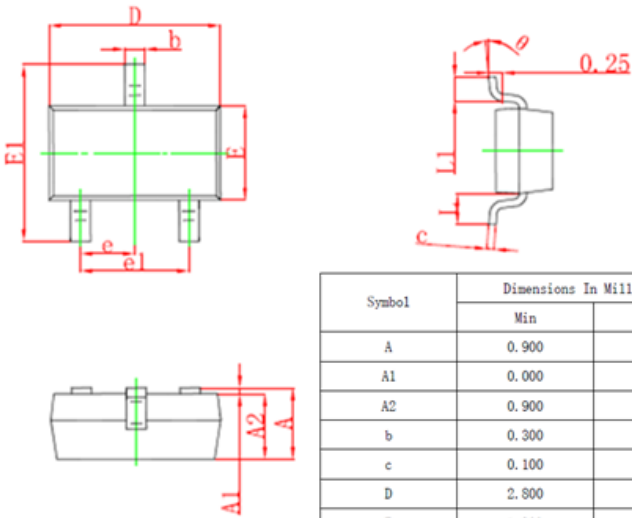




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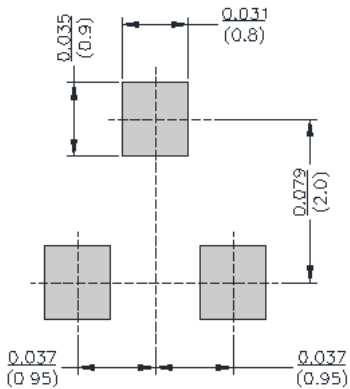


## ■SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
φ	0°	8°	0°	8°

## ■SOT-23 Suggested Pad Layout





## BZX84C2V4 THRU BZX84C75

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