

## Zener Diodes



### Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 2.4V~47V

### 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 BZX84C47	F2	Approximate 0.008	3000	30000	120000	7" reel



# BZX84C2V4 THRU BZX84C47

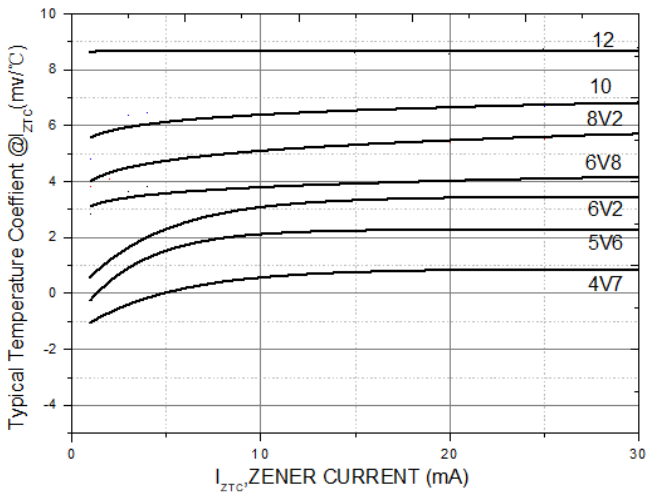
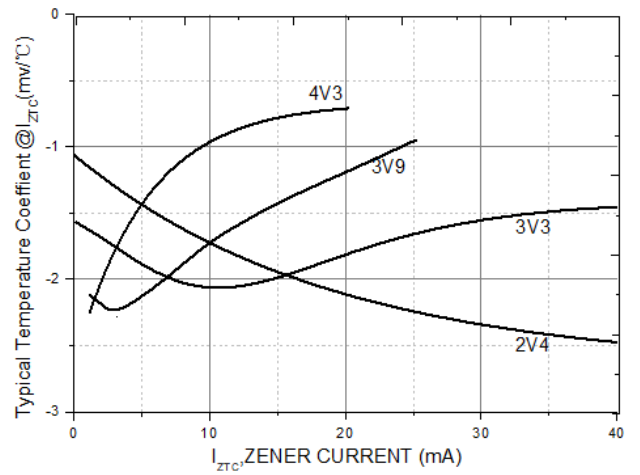
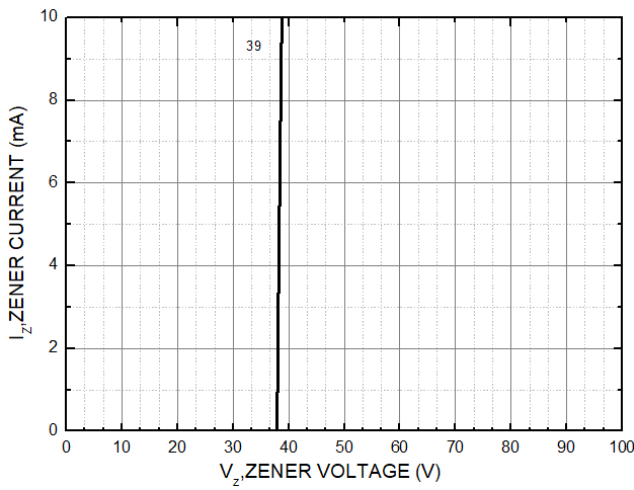
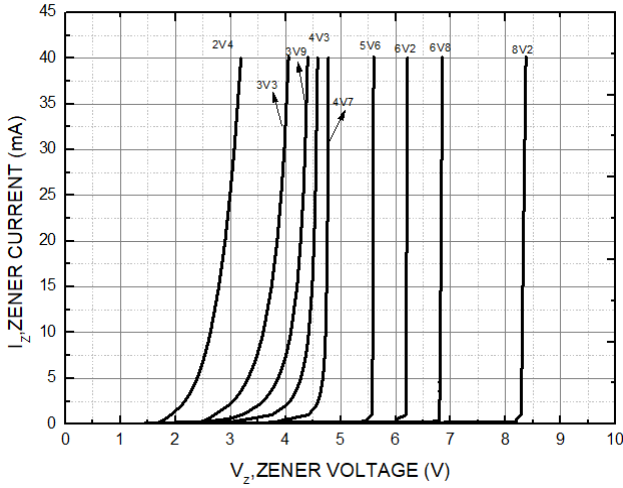
## ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

Type Number	Marking Code	Nominal Zener Voltage			Maximum Zener Impedance				Max Reverse Leakage Current	
		Vz 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)
BZX84C2V4	Z11	2.28	2.4	2.52	100	5	600	1	50	1
BZX84C2V7	Z12	2.5	2.7	2.9	100	5	600	1	20	1
BZX84C3V0	Z13	2.8	3.0	3.2	95	5	600	1	10	1
BZX84C3V3	Z14	3.1	3.3	3.5	95	5	600	1	5	1
BZX84C3V6	Z15	3.4	3.6	3.8	90	5	600	1	5	1
BZX84C3V9	Z16	3.7	3.9	4.1	90	5	600	1	3	1
BZX84C4V3	Z17	4.0	4.3	4.6	90	5	600	1	3	1
BZX84C4V7	Z1	4.4	4.7	5.0	80	5	500	1	3	2
BZX84C5V1	Z2	4.8	5.1	5.4	60	5	480	1	2	2
BZX84C5V6	Z3	5.2	5.6	6.0	40	5	400	1	1	2
BZX84C6V2	Z4	5.8	6.2	6.6	10	5	150	1	3	4
BZX84C6V8	Z5	6.4	6.8	7.2	15	5	80	1	2	4
BZX84C7V5	Z6	7.0	7.5	7.9	15	5	80	1	1	5
BZX84C8V2	Z7	7.7	8.2	8.7	15	5	80	1	0.7	5
BZX84C9V1	Z8	8.5	9.1	9.6	15	5	100	1	0.5	6
BZX84C10	Z9	9.4	10	10.6	20	5	150	1	0.2	7
BZX84C11	Y1 •	10.4	11	11.6	20	5	150	1	0.1	8
BZX84C12	Y2 •	11.4	12	12.7	25	5	150	1	0.1	8
BZX84C13	Y3	12.4	13	14.1	30	5	170	1	0.1	8
BZX84C15	Y4	14.25	15	15.75	30	5	200	1	0.1	10.5
BZX84C16	Y5	15.3	16	17.1	40	5	200	1	0.1	11.2
BZX84C18	Y6 •	16.8	18	19.1	45	5	225	1	0.1	12.6
BZX84C20	Y7	18.8	20	21.2	55	5	225	1	0.1	14
BZX84C22	Y8	20.8	22	23.3	55	5	250	1	0.1	15.4
BZX84C24	Y9	22.8	24	25.6	70	5	250	1	0.1	16.8
BZX84C27	Y10	25.1	27	28.9	80	2	300	1	0.1	18.9
BZX84C30	Y11 •	28	30	32	80	2	300	1	0.1	21.0
BZX84C33	Y12	31	33	35	80	2	325	1	0.1	23.1
BZX84C36	Y13	34	36	38	90	2	350	1	0.1	25.2
BZX84C39	Y14	37	39	41	130	2	350	1	0.1	27.3
BZX84C43	Y15	40.85	43	45.15	150	5	375	1	0.1	30.1
BZX84C47	Y16	44.65	47	49.35	170	5	375	1	0.1	32.9



# BZX84C2V4 THRU BZX84C47

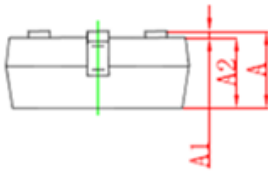
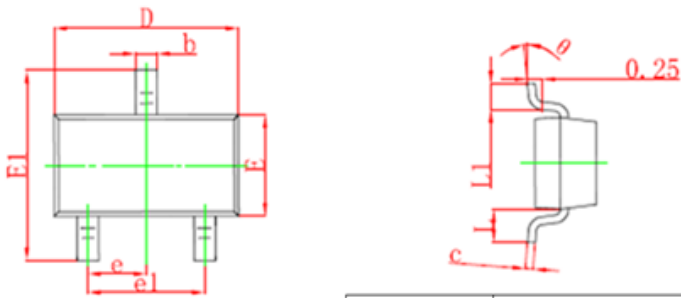
## ■ Characteristics (Typical)





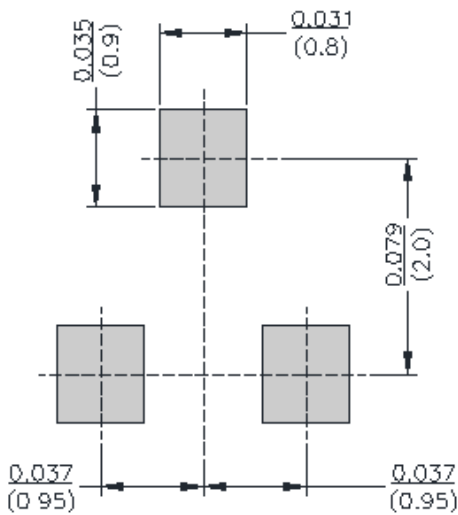
# BZX84C2V4 THRU BZX84C47

## ■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
ø	0°	8°	0°	8°

## ■SOT-23Suggested Pad Layout





## BZX84C2V4 THRU BZX84C47

---

### Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [Yangjie](#) manufacturer:*

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4691](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#)  
[1N5369B](#) [1N747A](#) [1N959B](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [NTE5121A](#) [NTE5147A](#) [NTE5152A](#) [NTE5155A](#) [NTE5164A](#)  
[JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#) [1N4737A](#) [1N4745ARL](#) [1N4752A](#) [1N4752ARL](#)  
[1N4760ARL](#) [1N5221B](#) [1N5231B-TR](#) [1N5236B](#) [1N5241BTR](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#)