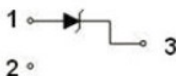
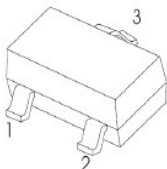


### FEATURES

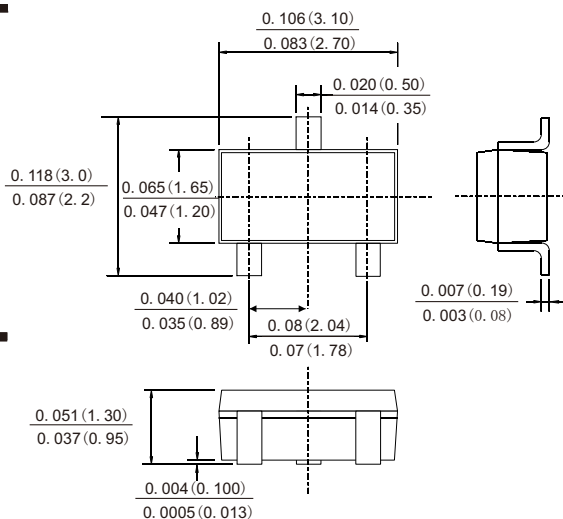
- Zener breakdown voltage range 2.4 V to 39V
- Package designed for optimal automated board assembly
- Small package size for high density applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

### MECHANICAL DATA

- Case: SOT-23 plastic case
- Weight: Approw. 8. 8mg



### SOT-23



Dimensions in inches and (millimeters)

### ABSOLUTE MAXIMUM RATINGS (TA=25°C)

	Symbols	Value	Units
Total Power dissipation	PD	300	mW
Thermal Resistance, Junction to Ambient <sup>1)</sup>	RθJA	417	°C/W
Junction temperature	TJ	150	°C
Storage temperature range	TSTG	-65 to+150	°C
1) Alumina=0.4×0.3×0.024 in, 99.5% alumina			

# BZX84B2V4 THRU BZX84B39

**Electrical Characteristics** ( $T_a = 25^\circ\text{C}$  unless otherwise noted,  $V_F < 0.9\text{V}$  at  $I_F = 10\text{mA}$ )

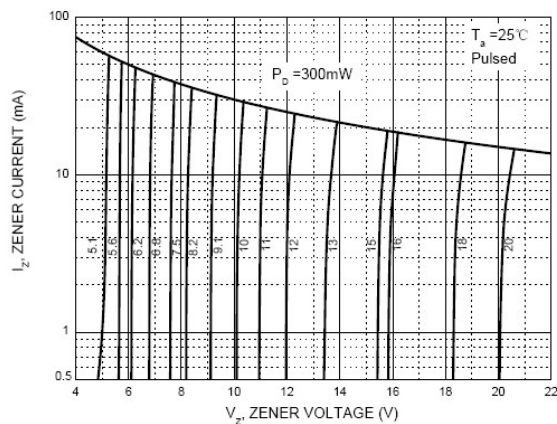
Type Number	Type Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current		Typical Temperature Coefficient @ $I_{ZT}=5\text{ mA}$	
		$V_Z@I_{ZT}$			$I_{ZT}$	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	$I_{ZK}$	$I_R$	$V_R$	$\text{mV}/^\circ\text{C}$	
		Nom(V)	Min(V)	Max(V)	mA	$\Omega$		mA	$\mu\text{A}$	V	Min	Max
BZX84B2V4	2Z11	2.4	2.35	2.45	5	100	600	1.0	50	1.0	-3.5	0
BZX84B2V7	2Z12	2.7	2.65	2.75	5	100	600	1.0	20	1.0	-3.5	0
BZX84B3V0	2Z13	3	2.94	3.06	5	95	600	1.0	10	1.0	-3.5	0
BZX84B3V3	2Z14	3.3	3.23	3.37	5	95	600	1.0	5	1.0	-3.5	0
BZX84B3V6	2Z15	3.6	3.53	3.67	5	90	600	1.0	5	1.0	-3.5	0
BZX84B3V9	2Z16	3.9	3.82	3.98	5	90	600	1.0	3	1.0	-3.5	0
BZX84B4V3	2Z17	4.3	4.21	4.39	5	90	600	1.0	3	1.0	-3.5	0
BZX84B4V7	2Z1	4.7	4.61	4.79	5	80	500	1.0	3	2.0	-3.5	0.2
BZX84B5V1	2Z2	5.1	5.00	5.20	5	60	480	1.0	2	2.0	-2.7	1.2
BZX84B5V6	2Z3	5.6	5.49	5.71	5	40	400	1.0	1	2.0	-2.0	2.5
BZX84B6V2	2Z4	6.2	6.08	6.32	5	10	150	1.0	3	4.0	0.4	3.7
BZX84B6V8	2Z5	6.8	6.66	6.94	5	15	80	1.0	2	4.0	1.2	4.5
BZX84B7V5	2Z6	7.5	7.35	7.65	5	15	80	1.0	1	5.0	2.5	5.3
BZX84B8V2	2Z7	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0	3.2	6.2
BZX84B9V1	2Z8	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0	3.8	7.0
BZX84B10	2Z9	10	9.80	10.20	5	20	150	1.0	0.2	7.0	4.5	8.0
BZX84B11	2Y1	11	10.78	11.22	5	20	150	1.0	0.1	8.0	5.4	9.0
BZX84B12	2Y2	12	11.76	12.24	5	25	150	1.0	0.1	8.0	6.0	10.0
BZX84B13	2Y3	13	12.74	13.26	5	30	170	1.0	0.1	8.0	7.0	11.0
BZX84B15	2Y4	15	14.70	15.30	5	30	200	1.0	0.1	10.5	9.2	13.0
BZX84B16	2Y5	16	15.68	16.32	5	40	200	1.0	0.1	11.2	10.4	14.0
BZX84B18	2Y6	18	17.64	18.36	5	45	225	1.0	0.1	12.6	12.4	16.0
BZX84B20	2Y7	20	19.60	20.40	5	55	225	1.0	0.1	14.0	14.4	18.0
BZX84B22	2Y8	22	21.56	22.44	5	55	250	1.0	0.1	15.4	16.4	20.0
BZX84B24	2Y9	24	23.52	24.48	5	70	250	1.0	0.1	16.8	18.4	22.0
BZX84B27	2Y10	27	26.46	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3
BZX84B30	2Y11	30	29.40	30.60	2	80	300	0.5	0.1	21.0	24.4	29.4
BZX84B33	2Y12	33	32.34	33.66	2	80	325	0.5	0.1	23.1	27.4	33.4
BZX84B36	2Y13	36	35.28	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4
BZX84B39	2Y14	39	38.22	39.78	2	130	350	0.5	0.1	27.3	33.4	41.2

# BZX84B2V4 THRU BZX84B39

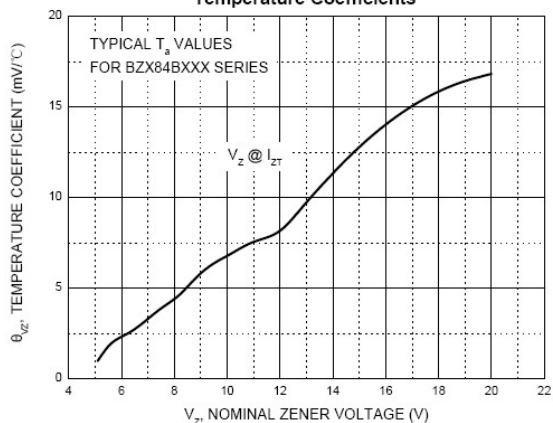
## Breakdown characteristics

at  $T_J = \text{constant}$  (pulsed)

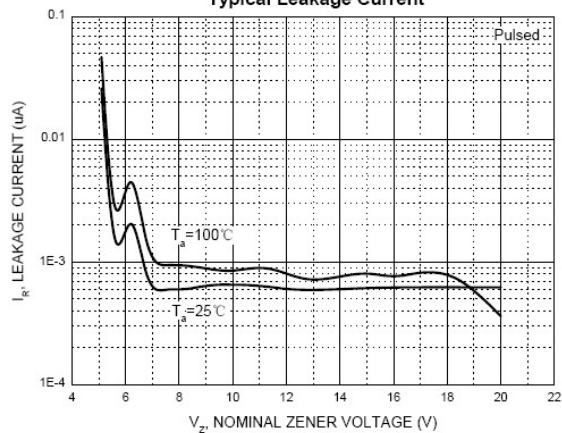
Zener Characteristics ( $V_Z$  5.1V to 20 V)



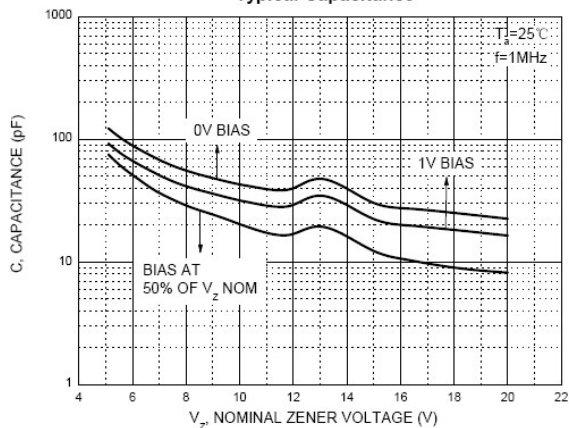
Temperature Coefficients



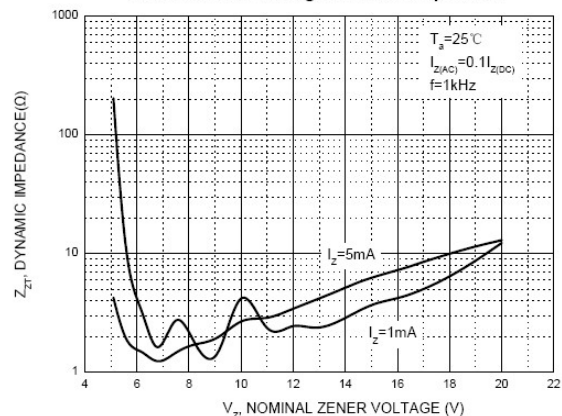
Typical Leakage Current



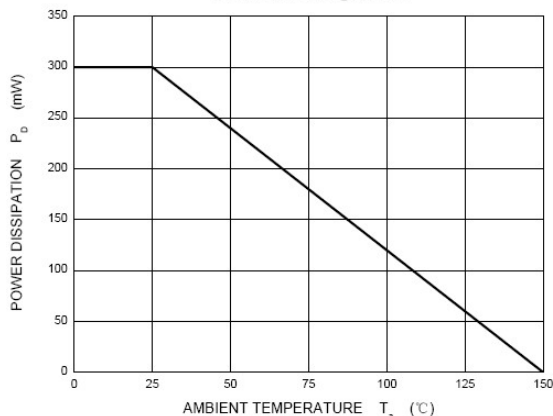
Typical Capacitance



Effect of Zener Voltage on Zener Impedance



Power Derating Curve



# BZX84B2V4 THRU BZX84B39

---

## Friendship Reminder

■ JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.

济南晶恒（以下简称 JH）保留未经通知，变更本文件和与本文件相关的产品及规格的权利。

■ Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

使用方应在使用、采购本产品之前获取并确认产品信息和规格书的最新版本。

■ JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.

JH 对其产品用于某特定用途的适用性，既不做任何保证、说明或担保，也不承担任何应用协助或使用方设计的法定责任。

■ JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

JH 不保证或承担任何责任，其产品被采购使用于任何非预期或授权的应用，

■ No license is granted by implication or otherwise under any intellectual property rights of JH.

此规格书属于 JH 的知识产权,没有经过我司授权不得抄袭。

■ JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.

没有 JH 的书面授权，JH 的产品不能在生命支撑设备或系统里作为关键零件使用。