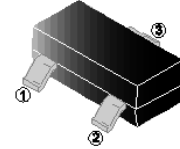


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Planar Die Construction
- 350mW Power Dissipation on FR-5 PCB
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Process
- Zener Voltages from 2.4V-75V
- Ultra-Small Surface Mount Package Power Dissipation

## SOT-23

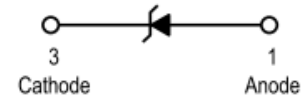


## MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams
- Marking: Marking Code

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch



## ORDER INFORMATION

Part Number	Type
BZX84Bxxx-C	Lead (Pb)-free and Halogen-free

## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Characteristic	Symbol	Value	Unit
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	A
Thermal Resistance Junction-Ambient	R <sub>θJA</sub>	357	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Type Number	Marking Code	Zener Voltage <sup>1</sup>				Maximum Zener Impedance			Maximum Reverse Current	
		V <sub>Z</sub> @I <sub>ZT</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @V <sub>R</sub>	
		Min.	Nom.	Max.					μA	V
		V			mA	Ω	mA	μA	V	
BZX84B2V4-C	W1 / 2Z11	2.35	2.4	2.45	5	100	600	1	50	1
BZX84B2V7-C	W2 / 2Z12	2.65	2.7	2.75	5	100	600	1	20	1
BZX84B3V0-C	W3 / 2Z13	2.94	3.0	3.06	5	95	600	1	10	1
BZX84B3V3-C	W4 / 2Z14	3.23	3.3	3.37	5	95	600	1	5	1
BZX84B3V6-C	W5 / 2Z15	3.53	3.6	3.67	5	90	600	1	5	1
BZX84B3V9-C	W6 / 2Z16	3.82	3.9	3.98	5	90	600	1	3	1

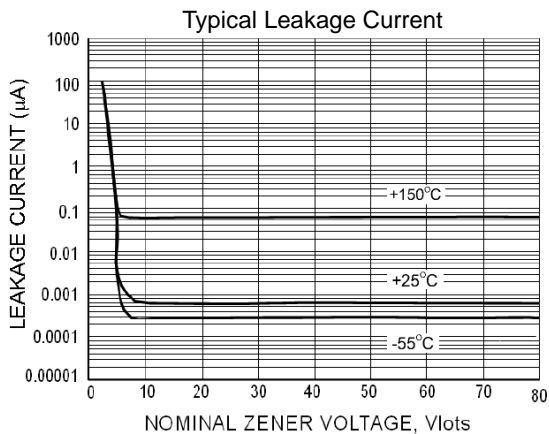
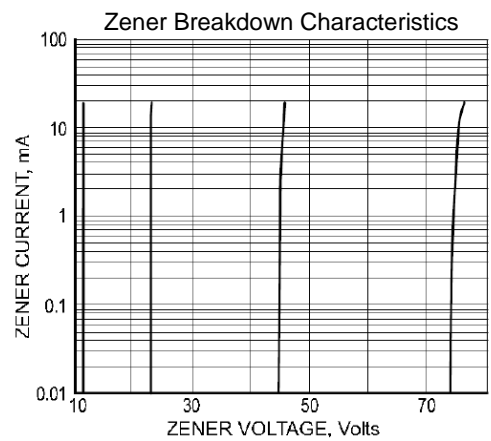
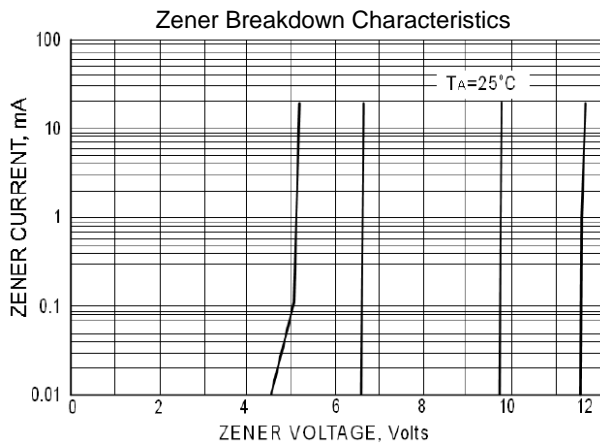
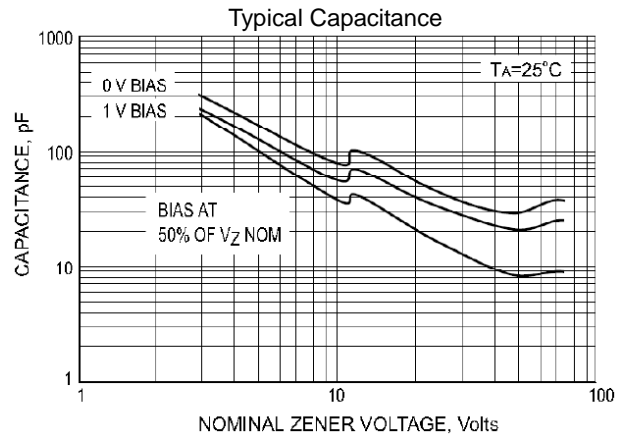
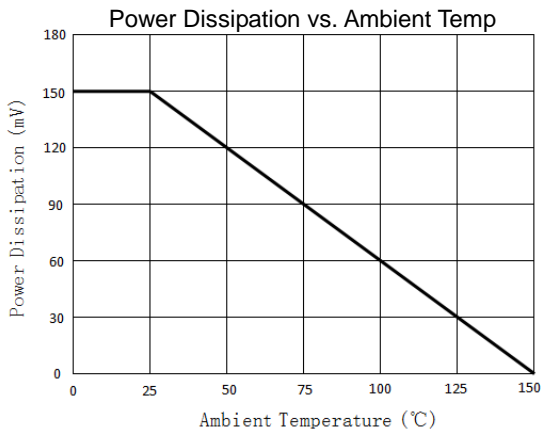
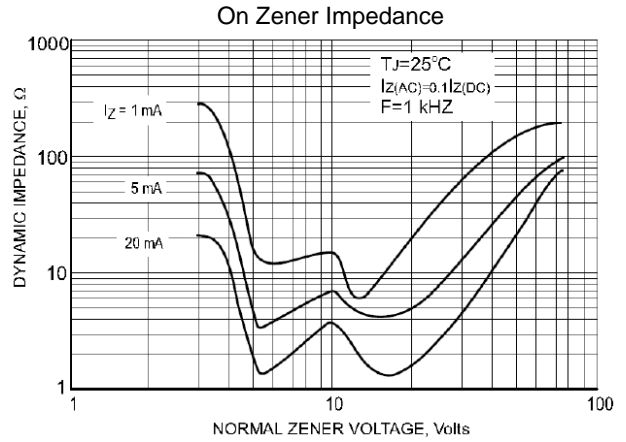
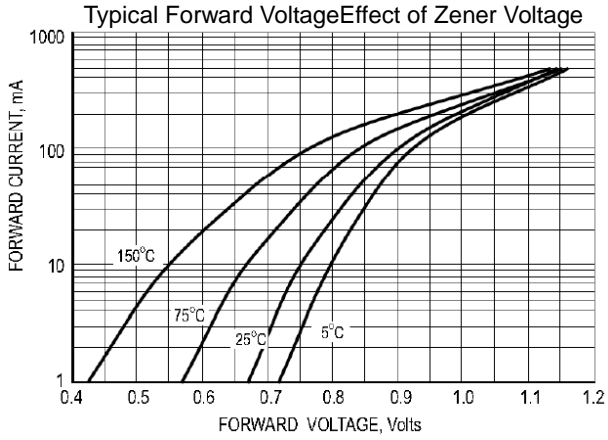
**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

Type Number	Marking Code	Zener Voltage <sup>1</sup>			I <sub>ZT</sub>	Maximum Zener Impedance			Maximum Reverse Current	
		V <sub>Z</sub> @ I <sub>ZT</sub>				Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>	
		Min.	Nom.	Max.	mA	Ω	mA	μA	V	
		V								
BZX84B4V3-C	W7 / 2Z17	4.21	4.3	4.39	5	90	600	1	3	1
BZX84B4V7-C	Z1 / 2Z1	4.61	4.7	4.79	5	80	500	1	3	2
BZX84B5V1-C	2Z2	5	5.1	5.2	5	60	480	1	2	2
BZX84B5V6-C	2Z3	5.49	5.6	5.71	5	40	400	1	1	2
BZX84B6V2-C	2Z4	6.08	6.2	6.32	5	10	150	1	3	4
BZX84B6V8-C	2Z5	6.66	6.8	6.94	5	15	80	1	2	4
BZX84B7V5-C	2Z6	7.35	7.5	7.65	5	15	80	1	1	5
BZX84B8V2-C	2Z7	8.04	8.2	8.36	5	15	80	1	0.7	5
BZX84B9V1-C	2Z8	8.92	9.1	9.28	5	15	100	1	0.5	6
BZX84B10-C	2Z9	9.8	10	10.2	5	20	150	1	0.2	7
BZX84B11-C	WH / 2Y1	10.78	11	11.22	5	20	150	1	0.1	8
BZX84B12-C	2Y2	11.76	12	12.24	5	25	150	1	0.1	8
BZX84B13-C	2Y3	12.74	13	13.26	5	30	170	1	0.1	8
BZX84B15-C	2Y4	14.7	15	15.3	5	30	200	1	0.1	10.5
BZX84B16-C	2Y5	15.68	16	16.32	5	40	200	1	0.1	11.2
BZX84B18-C	2Y6	17.64	18	18.36	5	45	225	1	0.1	12.6
BZX84B20-C	WO / 2Y7	19.6	20	20.4	5	55	225	1	0.1	14
BZX84B22-C	WP / 2Y8	21.56	22	22.44	5	55	250	1	0.1	15.4
BZX84B24-C	Y9 / 2Y9	23.52	24	24.48	5	70	250	1	0.1	16.8
BZX84B27-C	Y10 / 2Y10	26.46	27	27.54	2	80	300	0.5	0.1	18.9
BZX84B30-C	WT / 2Y11	29.4	30	30.6	2	80	300	0.5	0.1	21
BZX84B33-C	WU / 2Y12	32.34	33	33.66	2	80	325	0.5	0.1	23.1
BZX84B36-C	Y13 / 2Y13	35.28	36	36.72	2	90	350	0.5	0.1	25.2
BZX84B39-C	Y14 / 2Y14	38.22	39	39.78	2	130	350	0.5	0.1	27.3
BZX84B43-C	WY	42.14	43	43.86	2	150	375	0.5	0.1	30.1
BZX84B47-C	WZ	45.83	47	48.17	2	170	375	0.5	0.1	32.9
BZX84B51-C	XA	49.73	51	52.27	2	180	400	0.5	0.1	35.7
BZX84B56-C	XB	54.6	56	57.4	2	200	425	0.5	0.05	39.2
BZX84B62-C	XC	60.45	62	63.55	2	215	450	0.5	0.05	43.4
BZX84B68-C	XD	66.3	68	69.7	2	240	475	0.5	0.05	47.6
BZX84B75-C	XE	73.13	75	76.87	2	255	500	0.5	0.05	52.5

Note:

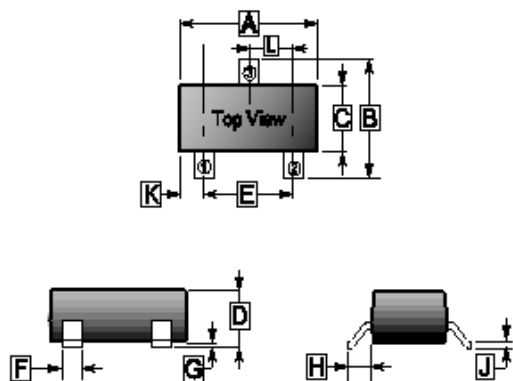
1. Pulse Width=10mS.

**CHARACTERISTIC CURVES**



**PACKAGE OUTLINE DIMENSIONS**

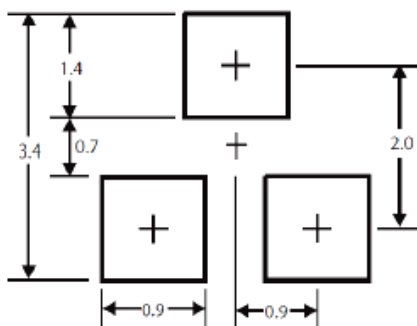
**SOT-23**



REF.	Millimeter	
	Min.	Max.
A	2.65	3.10
B	2.10	3.00
C	1.10	1.80
D	0.89	1.40
E	1.70	2.30
F	0.28	0.55
G	0	0.18
H	0.55 REF.	
J	0.05	0.26
K	0.60 REF.	
L	0.95 TYP.	

**MOUNTING PAD LAYOUT**

**SOT-23**



\*Dimensions in millimeters