



# BZX84C2V4 SERIES

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 2.4 to 75 Volt **POWER** 410 mWatt

**SOT-23**

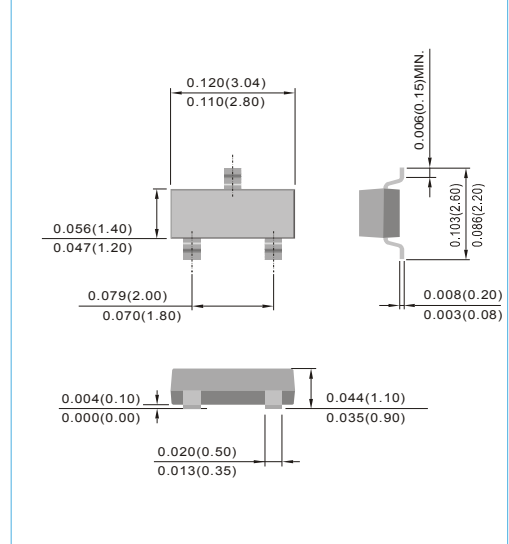
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams

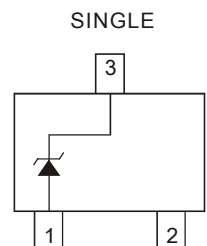


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Maximum Power Dissipation (Notes 1) at 25°C	P <sub>D</sub>	410	mW
Typical Thermal Resistance ,Junction to Ambient (Notes 2)	R <sub>θJA</sub>	500	°C/W
Operating Junction and StorageTemperature Range	T <sub>J</sub>	-55 to +150	°C

### NOTES:

1. Mounted on 50mmX16mm FR-4 board.
2. Mounted on minimum pad layout (1cmX1cm FR-4 board).





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Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	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>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
BZX84C2V4	2.4	2.28	2.52	100	5.0	600	1.00	50	1.0	W1
BZX84C2V7	2.7	2.57	2.84	100	5.0	600	1.00	20	1.0	W2
BZX84C3	3	2.85	3.15	95	5.0	600	1.00	10	1.0	W3
BZX84C3V3	3.3	3.14	3.47	95	5.0	600	1.00	5.0	1.0	W4
BZX84C3V6	3.6	3.42	3.78	90	5.0	600	1.00	5.0	1.0	W5
BZX84C3V9	3.9	3.71	4.10	90	5.0	600	1.00	3.0	1.0	W6
BZX84C4V3	4.3	4.09	4.52	90	5.0	600	1.00	3.0	1.0	W7
BZX84C4V7	4.7	4.47	4.94	80	5.0	500	1.00	3.0	2.0	W8
BZX84C5V1	5.1	4.85	5.36	60	5.0	480	1.00	2.0	2.0	W9
BZX84C5V6	5.6	5.32	5.88	40	5.0	400	1.00	1.0	2.0	WA
BZX84C6V2	6.2	5.89	6.51	10	5.0	150	1.00	3.0	4.0	WB
BZX84C6V8	6.8	6.46	7.14	15	5.0	80	1.00	2.0	4.0	WC
BZX84C7V5	7.5	7.13	7.88	15	5.0	80	1.00	1.0	5.0	WD
BZX84C8V2	8.2	7.79	8.61	15	5.0	80	1.00	0.7	5.0	WE
BZX84C8V7	8.7	8.27	9.14	15	5.0	100	1.00	0.7	5.0	87C
BZX84C9V1	9.1	8.65	9.56	15	5.0	100	1.00	0.5	6.0	WF
BZX84C10	10	9.50	10.50	20	5.0	150	1.00	0.2	7.0	WG
BZX84C11	11	10.45	11.55	20	5.0	150	1.00	0.1	8.0	WH
BZX84C12	12	11.40	12.60	25	5.0	150	1.00	0.1	8.0	WI
BZX84C13	13	12.35	13.65	30	5.0	170	1.00	0.1	8.0	WK
BZX84C14	14	13.30	14.70	30	5.0	170	1.00	0.1	10.0	WJ
BZX84C15	15	14.25	15.75	30	5.0	200	1.00	0.1	10.5	WL
BZX84C16	16	15.20	16.80	40	5.0	200	1.00	0.1	11.2	WM
BZX84C17	17	16.15	17.85	40	5.0	200	1.00	0.1	12.2	17C
BZX84C18	18	17.10	18.90	45	5.0	225	1.00	0.1	12.6	WN
BZX84C20	20	19.00	21.00	55	5.0	225	1.00	0.1	14.0	WO
BZX84C22	22	20.90	23.10	55	5.0	250	1.00	0.1	15.4	WP
BZX84C24	24	22.80	25.20	70	5.0	250	1.00	0.1	16.8	WR
BZX84C27	27	25.65	28.35	80	5.0	300	1.00	0.1	18.9	WS
BZX84C28	28	26.60	29.40	80	5.0	300	1.00	0.1	20.5	28C
BZX84C30	30	28.50	31.50	80	5.0	300	1.00	0.1	21.0	WT
BZX84C33	33	31.35	34.65	80	5.0	325	1.00	0.1	23.1	WU
BZX84C36	36	34.20	37.80	90	5.0	350	1.00	0.1	25.2	WW
BZX84C39	39	37.05	40.95	130	5.0	350	1.00	0.1	27.3	WX
BZX84C43	43	40.85	45.15	150	5.0	375	1.00	0.1	30.1	WY
BZX84C47	47	44.65	49.35	170	5.0	375	1.00	0.1	32.9	WZ
BZX84C51	51	48.45	53.55	100	5.0	400	1.00	0.1	38.0	XA
BZX84C56	56	53.20	58.80	135	2.5	1000	1.00	0.1	42.0	X2
BZX84C62	62	58.90	65.10	150	2.5	1000	1.00	0.1	46.0	X3
BZX84C68	68	64.60	71.40	200	2.5	1000	1.00	0.1	51.0	X4
BZX84C75	75	71.25	78.75	250	2.5	1000	1.00	0.1	56.0	X5



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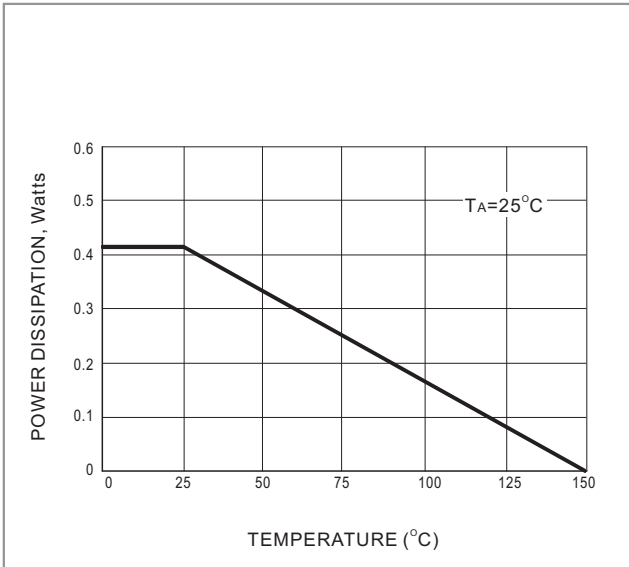


Fig.1 STEADY STATE POWER DERATING

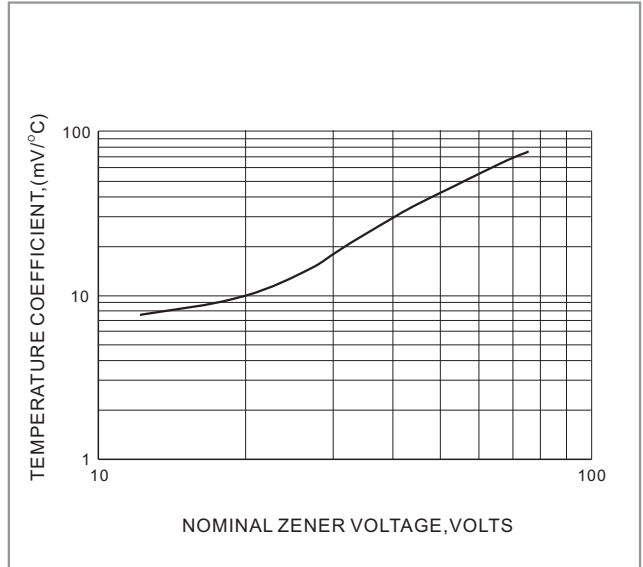


Fig.2 TEMPERATURE COEFFICIENTS

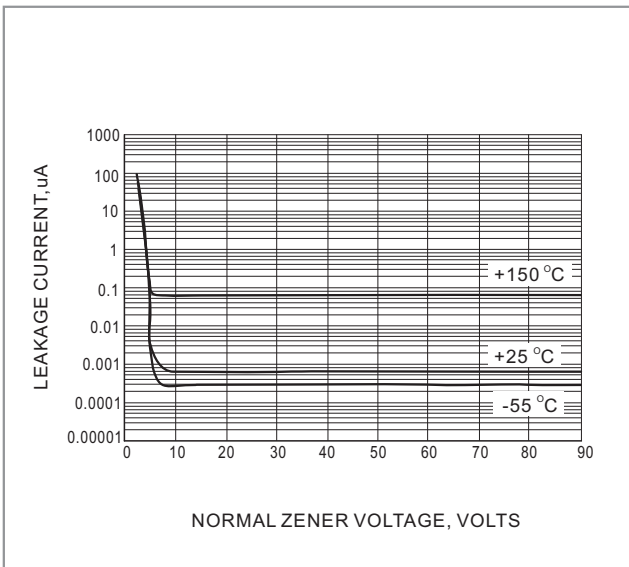


Fig.3 TYPICAL LEAKAGE CURRENT

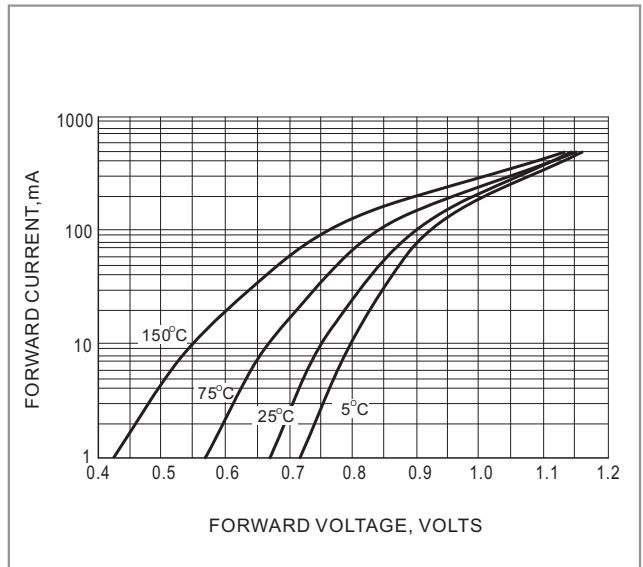


Fig.4 TYPICAL FORWARD VOLTAGE

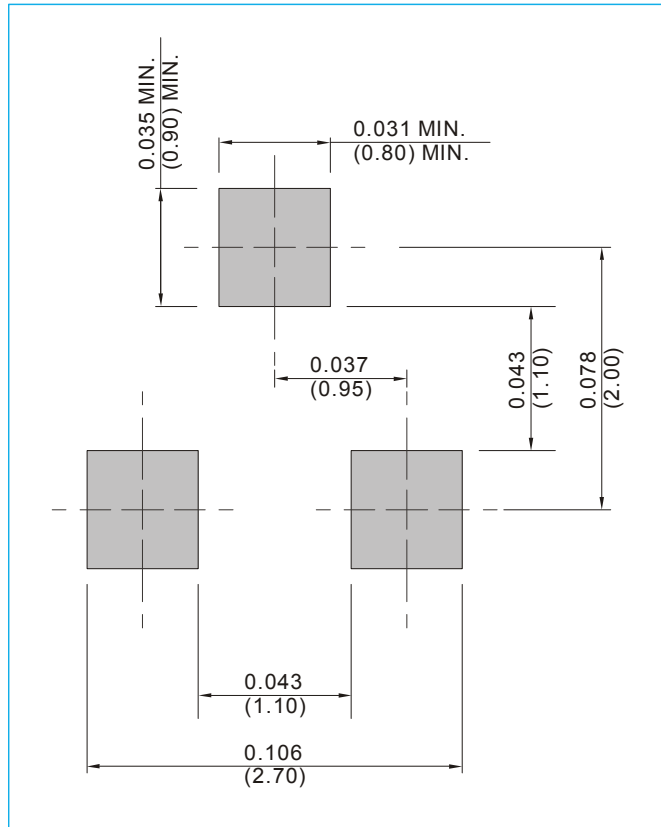


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## MOUNTING PAD LAYOUT

**SOT-23**

Unit : inch(mm)



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



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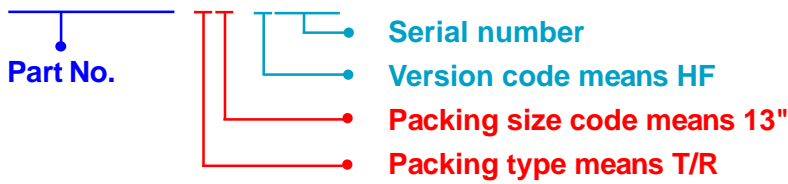
### Part No\_packing code\_Version

BZX84C2V4\_R1\_00001

BZX84C2V4\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> -5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			