



# BZX84C2V4-AU SERIES

## SURFACE MOUNT SILICON ZENER DIODES

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

**SOT-23**

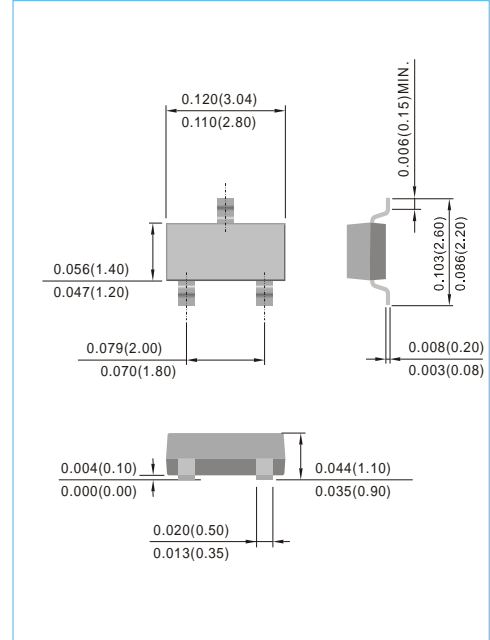
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

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

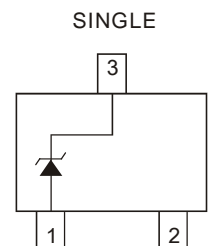


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C unless otherwise noted)

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

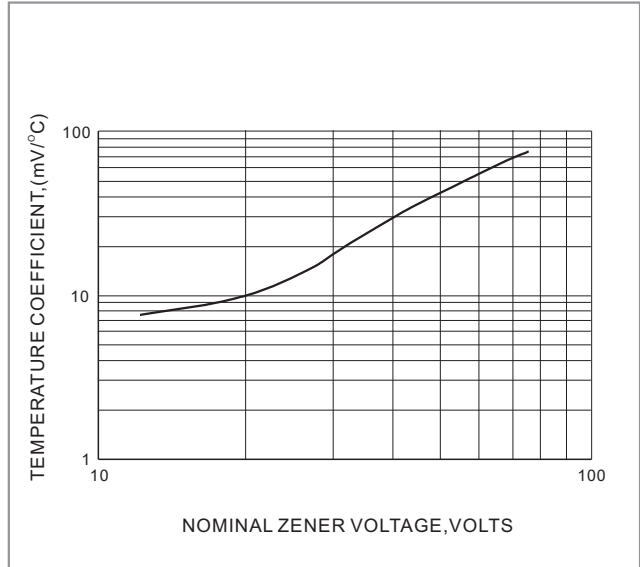


Fig.2 TEMPERATURE COEFFICENTS

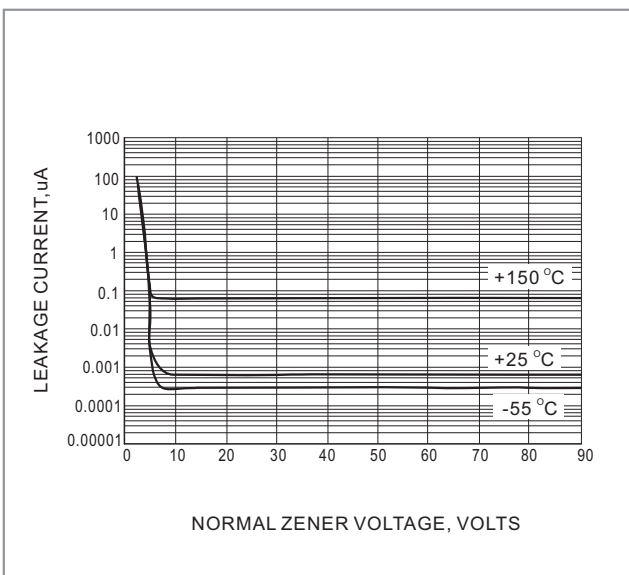


Fig.3 TYPICAL LEAKAGE CURRENT

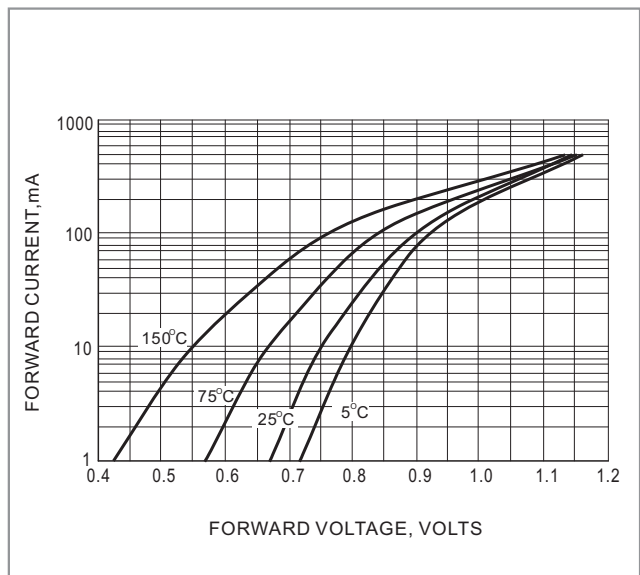
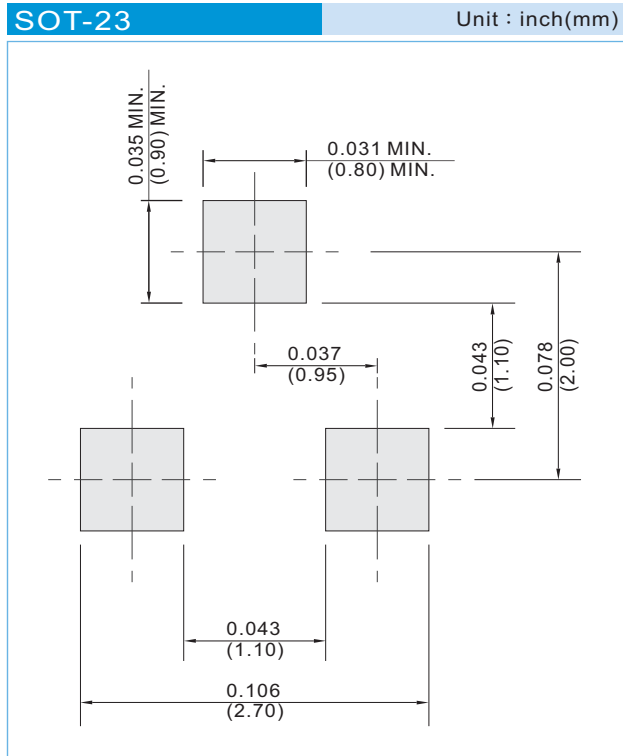


Fig.4 TYPICAL FORWARD VOLTAGE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



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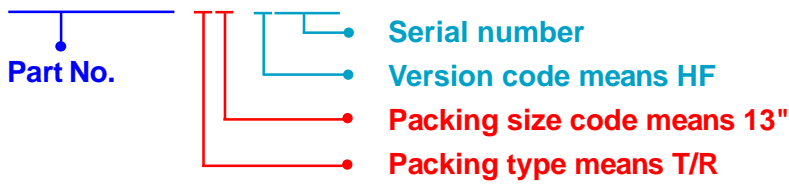
### Part No\_packing code\_Version

BZX84C2V4-AU\_R1\_000A1

BZX84C2V4-AU\_R2\_000A1

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>			