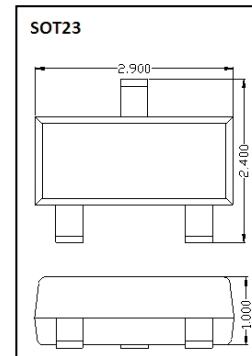
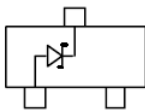


- ◇ Planar Die construction
- ◇ 350mW Power Dissipation
- ◇ Zener Voltages from 2.4V 51V
- ◇ RoHS compliant / Green EMC



Pin Configuration - Top View



MAXIMUM RATINGS (Ta = 25 °C)

| Symbol | Parameter | Value | Units |
|-----------------------------------|--|------------|-------|
| V _F | Maximum Forward Voltage @ I _F =10mA | 0.9 | V |
| P _(AV) | Power Dissipation | 350 | mW |
| T _J , T _{stg} | Operating And Storage Temperature | -55 to 150 | °C |
| I _{FSM} | Peak Forward Surge Current | 2.0 | A |
| T _{stg} | Storage Temperature Range | -55 to 150 | °C |
| R _j | Thermal Resistance Junction to Ambient | 357 | °C/W |

ELECTRICAL CHARACTERISTICS (Ta = 25 °C unless otherwise noted)

| Part Number | Marking | Nominal Zener Voltage | | | Max. Zener Impedance | | | | Max.Reverse Leakage Current | |
|-------------|---------|--------------------------------------|------|------|-----------------------------------|----|-----------------------------------|----|---------------------------------|-----|
| | | V _Z (V) @ I _{ZT} | | | Z _{ZT} @ I _{ZT} | | Z _{ZK} @ I _{ZK} | | I _R @ V _R | |
| | | Nom. | Min. | Max. | Ohm | mA | Ohm | mA | µA | V |
| BZX84C2V4 | W1/Z11 | 2.4 | 2.28 | 2.52 | 100 | 5 | 600 | 1 | 50 | 1.0 |
| BZX84C2V7 | W2/Z12 | 2.7 | 2.5 | 2.9 | 100 | 5 | 600 | 1 | 20 | 1.0 |
| BZX84C3V0 | W3/Z13 | 3 | 2.8 | 3.2 | 95 | 5 | 600 | 1 | 10 | 1.0 |
| BZX84C3V3 | W4/Z14 | 3.3 | 3.1 | 3.5 | 95 | 5 | 600 | 1 | 5 | 1.0 |
| BZX84C3V6 | W5/Z15 | 3.6 | 3.4 | 3.8 | 90 | 5 | 600 | 1 | 5 | 1.0 |
| BZX84C3V9 | W6/Z16 | 3.9 | 3.7 | 4.1 | 90 | 5 | 600 | 1 | 3 | 1.0 |
| BZX84C4V3 | W7/Z17 | 4.3 | 4 | 4.6 | 90 | 5 | 600 | 1 | 3 | 1.0 |

| | | | | | | | | | | |
|-----------|---------|-----|-------|-------|-----|---|-----|-----|------|-------|
| BZX84C4V7 | W8/Z1 | 4.7 | 4.4 | 5 | 80 | 5 | 500 | 1 | 3 | 2.0 |
| BZX84C5V1 | W9/Z2 | 5.1 | 4.8 | 5.4 | 60 | 5 | 480 | 1 | 2 | 2.0 |
| BZX84C5V6 | WA/Z3 | 5.6 | 5.2 | 6 | 40 | 5 | 400 | 1 | 1 | 2.0 |
| BZX84C6V2 | WB/Z4 | 6.2 | 5.8 | 6.6 | 10 | 5 | 150 | 1 | 3 | 4.0 |
| BZX84C6V8 | WC/Z5 | 6.8 | 6.4 | 7.2 | 15 | 5 | 80 | 1 | 2 | 4.0 |
| BZX84C7V5 | WD/Z6 | 7.5 | 7 | 7.9 | 15 | 5 | 80 | 1 | 1 | 5.0 |
| BZX84C8V2 | WE/Z7 | 8.2 | 7.7 | 8.7 | 15 | 5 | 80 | 1 | 0.7 | 5.0 |
| BZX84C9V1 | WF/Z8 | 9.1 | 8.5 | 9.6 | 15 | 5 | 100 | 1 | 0.5 | 6.0 |
| BZX84C10 | WG/Z9 | 10 | 9.4 | 10.6 | 20 | 5 | 150 | 1 | 0.2 | 7.0 |
| BZX84C11 | WH/Y1 | 11 | 10.4 | 11.6 | 20 | 5 | 150 | 1 | 0.1 | 8.0 |
| BZX84C12 | WI/Y2 | 12 | 11.4 | 12.7 | 25 | 5 | 150 | 1 | 0.1 | 8.0 |
| BZX84C13 | WK/Y3 | 13 | 12.4 | 14.1 | 30 | 5 | 170 | 1 | 0.1 | 8.0 |
| BZX84C15 | WL/Y4 | 15 | 13.8 | 15.6 | 30 | 5 | 200 | 1 | 0.1 | 10.5 |
| BZX84C16 | WM /Y5 | 16 | 15.3 | 17.1 | 40 | 5 | 200 | 1 | 0.1 | 11.2 |
| BZX84C18 | WN/Y6 | 18 | 16.8 | 19.1 | 45 | 5 | 225 | 1 | 0.1 | 12.6 |
| BZX84C20 | WO/Y7 | 20 | 18.8 | 21.2 | 55 | 5 | 225 | 1 | 0.1 | 14.0 |
| BZX84C22 | WP/Y8 | 22 | 20.8 | 23.3 | 55 | 5 | 250 | 1 | 0.1 | 15.4 |
| BZX84C24 | WR/Y9 | 24 | 22.8 | 25.6 | 70 | 5 | 250 | 1 | 0.1 | 16.8 |
| BZX84C27 | WS/Y10 | 27 | 25.1 | 28.9 | 80 | 2 | 300 | 1 | 0.1 | 18.9 |
| BZX84C30 | WT /Y11 | 30 | 28 | 32 | 80 | 2 | 300 | 1 | 0.1 | 21.0 |
| BZX84C33 | WU/Y12 | 33 | 31 | 35 | 80 | 2 | 325 | 1 | 0.1 | 23.1 |
| BZX84C36 | WW/Y13 | 36 | 34 | 38 | 90 | 2 | 350 | 1 | 0.1 | 25.2 |
| BZX84C39 | WX/Y14 | 39 | 37 | 41 | 130 | 2 | 350 | 1 | 0.1 | 27.3 |
| BZX84C43 | WY/Y15 | 43 | 40.85 | 45.15 | 150 | 5 | 375 | 1 | 0.1 | 30.10 |
| BZX84C47 | WZ/Y16 | 47 | 44.65 | 49.35 | 170 | 5 | 375 | 1 | 0.1 | 32.90 |
| BZX84C51 | XA/Y17 | 51 | 48.45 | 53.55 | 100 | 5 | 400 | 1 | 0.1 | 35.70 |
| BZX84C62 | Y19 | 62 | 58.0 | 66.0 | 215 | 2 | 450 | 0.5 | 0.05 | 43.40 |

ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^\circ\text{C}$ unless otherwise noted)

| Part Number | Marking | Nominal Zener Voltage | | | Max. Zener Impedance | | | | Max.Reverse Leakage Current | |
|-------------|---------|--------------------------------------|-------|-------|-----------------------------------|----|-----------------------------------|----|---------------------------------|------|
| | | V _Z (V) @ I _{ZT} | | | Z _{ZT} @ I _{ZT} | | Z _{ZK} @ I _{ZK} | | I _R @ V _R | |
| | | Nom. | Min. | Max. | Ohm | mA | Ohm | mA | μA | V |
| BZX84B4V3 | W7 | 4.3 | 4.21 | 4.39 | 90 | 5 | 600 | 1 | 3.0 | 1.0 |
| BZX84B4V7 | W8/Z1 | 4.7 | 4.61 | 4.79 | 80 | 5 | 500 | 1 | 3.0 | 2.0 |
| BZX84B5V1 | W9/2Z2 | 5.1 | 5.00 | 5.20 | 60 | 5 | 480 | 1 | 2.0 | 2.0 |
| BZX84B5V6 | WA/2Z3 | 5.6 | 5.49 | 5.71 | 40 | 5 | 400 | 1 | 1.0 | 2.0 |
| BZX84B6V2 | WB/2Z4 | 6.2 | 6.08 | 6.32 | 10 | 5 | 150 | 1 | 3.0 | 4.0 |
| BZX84B6V8 | WC/2Z5 | 6.8 | 6.66 | 6.94 | 15 | 5 | 80 | 1 | 2.0 | 4.0 |
| BZX84B7V5 | WD/2Z6 | 7.5 | 7.35 | 7.65 | 15 | 5 | 80 | 1 | 1.0 | 5.0 |
| BZX84B8V2 | WE/2Z7 | 8.2 | 8.04 | 8.36 | 15 | 5 | 80 | 1 | 0.7 | 5.0 |
| BZX84B9V1 | WF/2Z8 | 9.1 | 8.92 | 9.28 | 15 | 5 | 100 | 1 | 0.5 | 6.0 |
| BZX84B10 | WG/2Z9 | 10 | 9.80 | 10.20 | 20 | 5 | 150 | 1 | 0.2 | 7.0 |
| BZX84B11 | WH/2Y1 | 11 | 10.78 | 11.22 | 20 | 5 | 150 | 1 | 0.1 | 8.0 |
| BZX84B12 | WI/2Y2 | 12 | 11.76 | 12.24 | 25 | 5 | 150 | 1 | 0.1 | 8.0 |
| BZX84B13 | WK/2Y3 | 13 | 12.74 | 13.26 | 30 | 5 | 170 | 1 | 0.1 | 8.0 |
| BZX84B15 | WL/2Y4 | 15 | 14.70 | 15.30 | 30 | 5 | 200 | 1 | 0.1 | 10.5 |
| BZX84B16 | WM/2Y5 | 16 | 15.68 | 16.32 | 40 | 5 | 200 | 1 | 0.1 | 11.2 |
| BZX84B18 | WN/2Y6 | 18 | 17.64 | 18.36 | 45 | 5 | 225 | 1 | 0.1 | 12.6 |
| BZX84B20 | WO/2Y7 | 20 | 19.60 | 20.40 | 55 | 5 | 225 | 1 | 0.1 | 14.0 |
| BZX84B22 | WP/Y8 | 22 | 21.56 | 22.44 | 55 | 5 | 250 | 1 | 0.1 | 15.4 |
| BZX84B24 | WR/Y9 | 24 | 23.52 | 24.48 | 70 | 5 | 250 | 1 | 0.1 | 16.8 |
| BZX84B27 | WS/Y10 | 27 | 26.46 | 27.54 | 80 | 5 | 300 | 1 | 0.1 | 18.9 |
| BZX84B30 | WT /Y11 | 30 | 29.40 | 30.60 | 80 | 5 | 300 | 1 | 0.1 | 21.0 |
| BZX84B33 | WU/Y12 | 33 | 32.34 | 33.66 | 80 | 5 | 325 | 1 | 0.1 | 23.1 |
| BZX84B36 | WW/Y13 | 36 | 35.28 | 36.72 | 90 | 5 | 350 | 1 | 0.1 | 25.2 |
| BZX84B39 | WX/Y14 | 39 | 38.22 | 39.78 | 130 | 5 | 350 | 1 | 0.1 | 27.3 |
| BZX84B43 | WY | 43 | 42.14 | 43.86 | 150 | 5 | 375 | 1 | 0.1 | 30.1 |

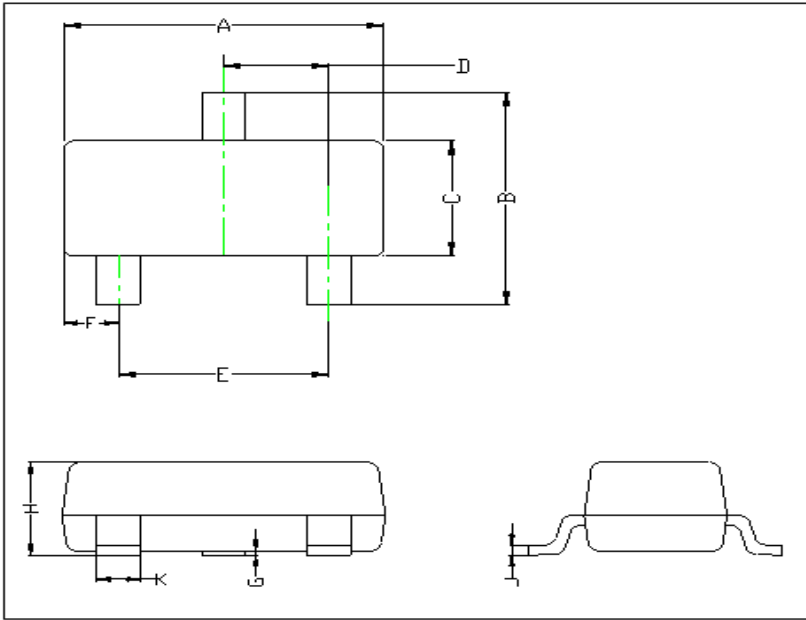
| | | | | | | | | | | |
|----------|----|----|-------|-------|-----|---|-----|---|-----|------|
| BZX84B47 | WZ | 47 | 46.06 | 47.94 | 170 | 5 | 375 | 1 | 0.1 | 32.9 |
| BZX84B51 | XA | 51 | 49.98 | 52.02 | 100 | 5 | 750 | 1 | 0.1 | 38.0 |

ORDERING INFORMATION

| Device | Package | Shipping | Tape wide | Emboss pitch | Tape specification | Notes |
|------------------------|---------|---------------------------------|-----------|--------------|--------------------|-------|
| BZX84C2V4- BZX84B51 | SOT23 | Tape & Reel 3000pcs /7" Reel | 8mm | 4mm | Conductive | |

PACKAGE DIMENSIONS

Package Outline : SOT23



The diagram shows three views of the SOT23 package: a top view with dimensions A, D, E, and F; a side view with dimensions B, C, and H; and a bottom view with dimension K. A vertical dashed green line indicates the center of the package.

| Symbol | Dimensions in mm | |
|--------|------------------|-------|
| | Min. | Max. |
| A | 2.800 | 3.040 |
| B | 2.100 | 2.640 |
| C | 1.200 | 1.400 |
| D | 0.890 | 1.030 |
| E | 1.780 | 2.050 |
| F | 0.450 | 0.600 |
| G | 0.013 | 0.100 |
| H | 0.900 | 1.110 |
| J | 0.090 | 0.180 |
| K | 0.370 | 0.510 |

Note:

1. Halogen free ,EMC
2. Pb free solder
3. Lead thickness solder plating
4. Lead frame CAC-5
5. Other Tolerance ± 0.05
6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
7. Unit : mm

SOT23 Package Outline