

## BZX84B4V3W SERIES

### SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 4.3 to 51 Volts **POWER** 200 mWatts

**SOT-323**

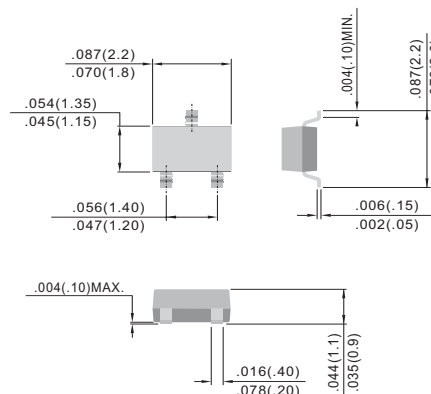
Unit: inch (mm)

#### FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Zener Voltages from 4.3~51V
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

#### MECHANICAL DATA

- Case: SOT-323, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx Weight : 0.0048 grams
- Mounting Position : Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter                                             | Symbol | Value       | Units            |
|-------------------------------------------------------|--------|-------------|------------------|
| Power Dissipation @ $T_A = 25^\circ\text{C}$ (Note A) | $P_D$  | 200         | mW               |
| Operating Junction and Storage Temperature Range      | $T_J$  | -55 to +150 | $^\circ\text{C}$ |

NOTE :

A. Mounted on 5.0mm<sup>2</sup>(.013mm thick) land areas.



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| Part Number | Nominal Zener Voltage            |        |        | Max. Zener Impedance              |     |                                   |      | Max Reverse Leakage Current     |       | Marking Code | Package |
|-------------|----------------------------------|--------|--------|-----------------------------------|-----|-----------------------------------|------|---------------------------------|-------|--------------|---------|
|             | 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     |              |         |
| BZX84B4V3W  | 4.3                              | 4.21   | 4.39   | 90                                | 5.0 | 600                               | 1.00 | 3.0                             | 1.0   | W7           | SOT-323 |
| BZX84B4V7W  | 4.7                              | 4.61   | 4.79   | 80                                | 5.0 | 500                               | 1.00 | 3.0                             | 2.0   | W8           | SOT-323 |
| BZX84B5V1W  | 5.1                              | 5.00   | 5.20   | 60                                | 5.0 | 480                               | 1.00 | 2.0                             | 2.0   | W9           | SOT-323 |
| BZX84B5V6W  | 5.6                              | 5.49   | 5.71   | 40                                | 5.0 | 400                               | 1.00 | 1.0                             | 2.0   | WA           | SOT-323 |
| BZX84B6V2W  | 6.2                              | 6.08   | 6.32   | 10                                | 5.0 | 150                               | 1.00 | 3.0                             | 4.0   | WB           | SOT-323 |
| BZX84B6V8W  | 6.8                              | 6.66   | 6.94   | 15                                | 5.0 | 80                                | 1.00 | 2.0                             | 4.0   | WC           | SOT-323 |
| BZX84B7V5W  | 7.5                              | 7.35   | 7.65   | 15                                | 5.0 | 80                                | 1.00 | 1.0                             | 5.0   | WD           | SOT-323 |
| BZX84B8V2W  | 8.2                              | 8.04   | 8.36   | 15                                | 5.0 | 80                                | 1.00 | 0.7                             | 5.0   | WE           | SOT-323 |
| BZX84B9V1W  | 9.1                              | 8.92   | 9.28   | 15                                | 5.0 | 100                               | 1.00 | 0.5                             | 6.0   | WF           | SOT-323 |
| BZX84B10W   | 10                               | 9.80   | 10.20  | 20                                | 5.0 | 150                               | 1.00 | 0.2                             | 7.0   | WG           | SOT-323 |
| BZX84B11W   | 11                               | 10.78  | 11.22  | 20                                | 5.0 | 150                               | 1.00 | 0.1                             | 8.0   | WH           | SOT-323 |
| BZX84B12W   | 12                               | 11.76  | 12.24  | 25                                | 5.0 | 150                               | 1.00 | 0.1                             | 8.0   | WI           | SOT-323 |
| BZX84B13W   | 13                               | 12.74  | 13.26  | 30                                | 5.0 | 170                               | 1.00 | 0.1                             | 8.0   | WK           | SOT-323 |
| BZX84B14W   | 14                               | 13.72  | 14.28  | 30                                | 5.0 | 170                               | 1.00 | 0.1                             | 10.0  | WJ           | SOT-323 |
| BZX84B15W   | 15                               | 14.70  | 15.30  | 30                                | 5.0 | 200                               | 1.00 | 0.1                             | 10.5  | WL           | SOT-323 |
| BZX84B16W   | 16                               | 15.68  | 16.32  | 40                                | 5.0 | 200                               | 1.00 | 0.1                             | 11.2  | WM           | SOT-323 |
| BZX84B17W   | 17                               | 16.66  | 17.34  | 40                                | 5.0 | 200                               | 1.00 | 0.1                             | 12.2  | 17C          | SOT-323 |
| BZX84B18W   | 18                               | 17.64  | 18.36  | 45                                | 5.0 | 225                               | 1.00 | 0.1                             | 12.6  | WN           | SOT-323 |
| BZX84B20W   | 20                               | 19.60  | 20.40  | 55                                | 5.0 | 225                               | 1.00 | 0.1                             | 14.0  | WO           | SOT-323 |
| BZX84B22W   | 22                               | 21.56  | 22.44  | 55                                | 5.0 | 250                               | 1.00 | 0.1                             | 15.4  | WP           | SOT-323 |
| BZX84B24W   | 24                               | 23.52  | 24.48  | 70                                | 5.0 | 250                               | 1.00 | 0.1                             | 16.8  | WR           | SOT-323 |
| BZX84B27W   | 27                               | 26.46  | 27.54  | 80                                | 5.0 | 300                               | 1.00 | 0.1                             | 18.90 | WS           | SOT-323 |
| BZX84B28W   | 28                               | 27.44  | 28.56  | 80                                | 5.0 | 300                               | 1.00 | 0.1                             | 20.50 | 28C          | SOT-323 |
| BZX84B30W   | 30                               | 29.40  | 30.60  | 80                                | 5.0 | 300                               | 1.00 | 0.1                             | 21.00 | WT           | SOT-323 |
| BZX84B33W   | 33                               | 32.34  | 33.66  | 80                                | 5.0 | 325                               | 1.00 | 0.1                             | 23.10 | WU           | SOT-323 |
| BZX84B36W   | 36                               | 35.28  | 36.72  | 90                                | 5.0 | 350                               | 1.00 | 0.1                             | 25.20 | WW           | SOT-323 |
| BZX84B39W   | 39                               | 38.22  | 39.78  | 130                               | 5.0 | 350                               | 1.00 | 0.1                             | 27.30 | WX           | SOT-323 |
| BZX84B43W   | 43                               | 42.14  | 43.86  | 150                               | 5.0 | 375                               | 1.00 | 0.1                             | 30.10 | WY           | SOT-323 |
| BZX84B47W   | 47                               | 46.06  | 47.94  | 170                               | 5.0 | 375                               | 1.00 | 0.1                             | 32.90 | WZ           | SOT-323 |
| BZX84B51W   | 51                               | 49.98  | 52.02  | 100                               | 5.0 | 750                               | 1.00 | 0.1                             | 38.00 | XA           | SOT-323 |



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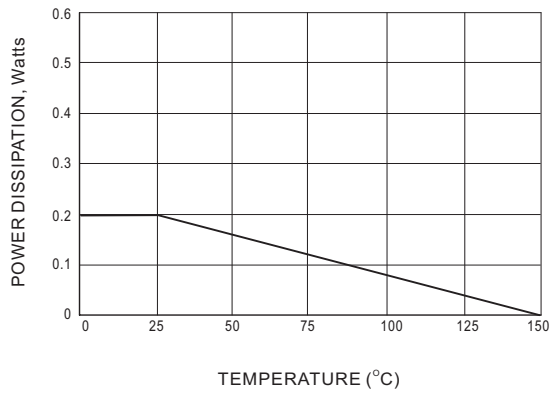


Fig.1 STEADY STATE POWER DERATING

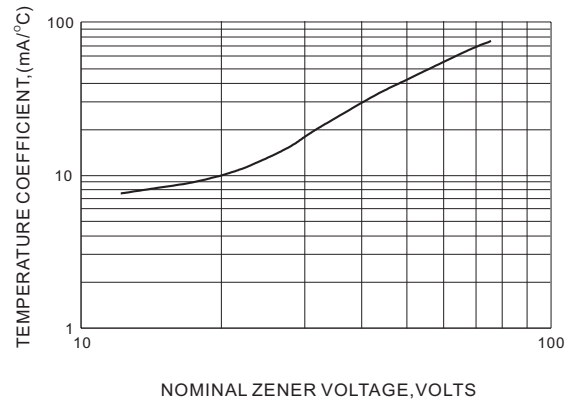


Fig.2 TEMPERATURE COEFFICIENTS

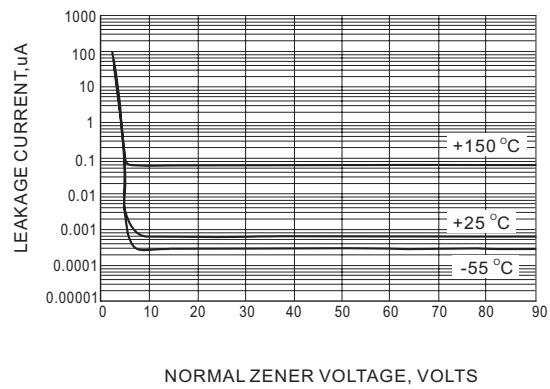


Fig.3 TYPICAL LEAKAGE CURRENT

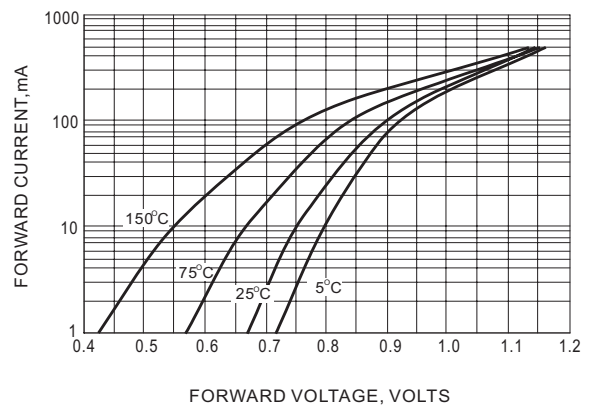


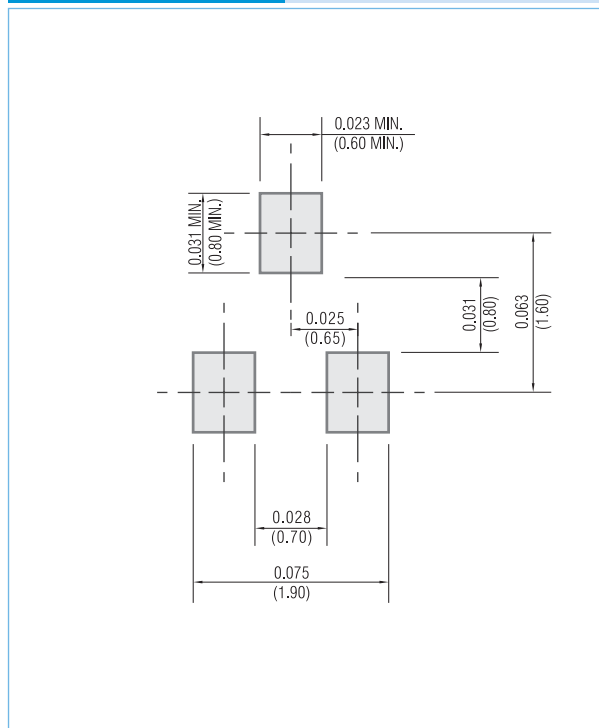
Fig.4 TYPICAL FORWARD VOLTAGE

## BZX84B4V3W SERIES

### MOUNTING PAD LAYOUT

SOT-323

Unit: inch ( mm )



### ORDER INFORMATION

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

### LEGAL STATEMENT

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