

## BZX84C2V4 SERIES

### SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 2.4 to 75 Volts **POWER** 410 mWatts

SOT-23

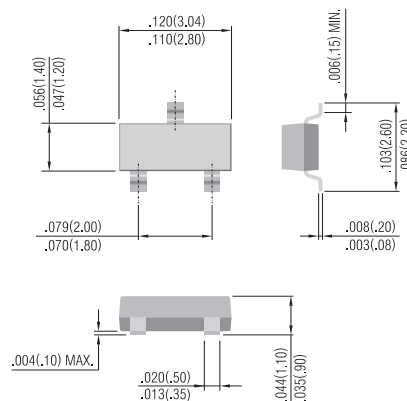
Unit: inch ( mm )

#### FEATURES

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

#### MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.008 grams
- Mounting Position: Any

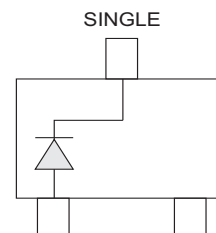


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter                                        | Symbol         | Value       | Units |
|--------------------------------------------------|----------------|-------------|-------|
| Maximum Power Dissipation (Notes A) at 25°C      | P <sub>D</sub> | 410         | mW    |
| Operating Junction and Storage Temperature Range | T <sub>J</sub> | -55 to +150 | °C    |

#### NOTES:

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 |
|-------------------------|----------------------------------|--------|--------|-----------------------------------|-----|-----------------------------------|------|---------------------------------|------|--------------|
|                         | 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   | uA                              | V    |              |
| 410 mWatts Zener Diodes |                                  |        |        |                                   |     |                                   |      |                                 |      |              |
| 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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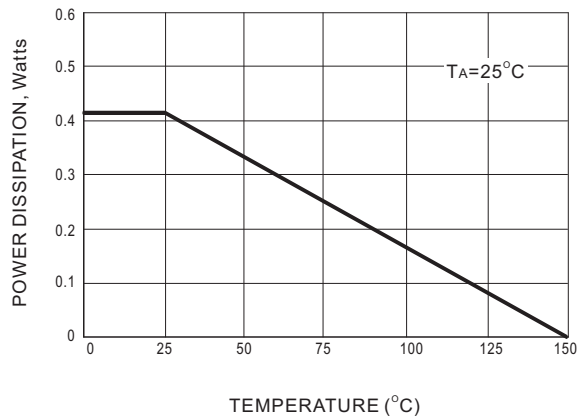


Fig.1 STEADY STATE POWER DERATING

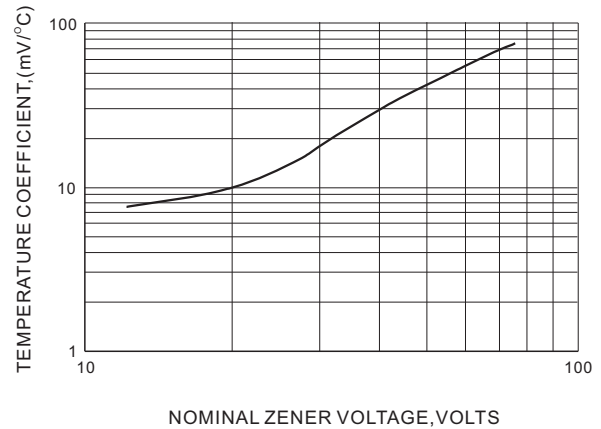


Fig.2 TEMPERATURE COEFFICIENTS

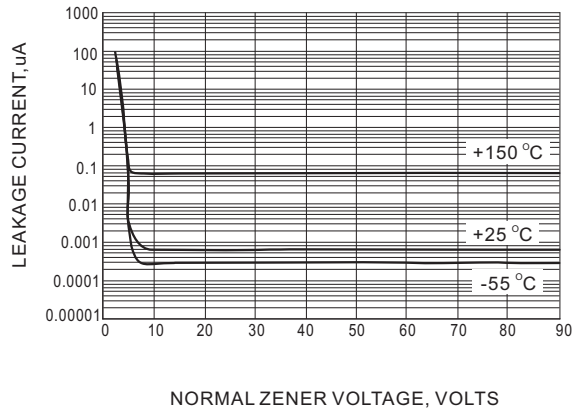


Fig.3 TYPICAL LEAKAGE CURRENT

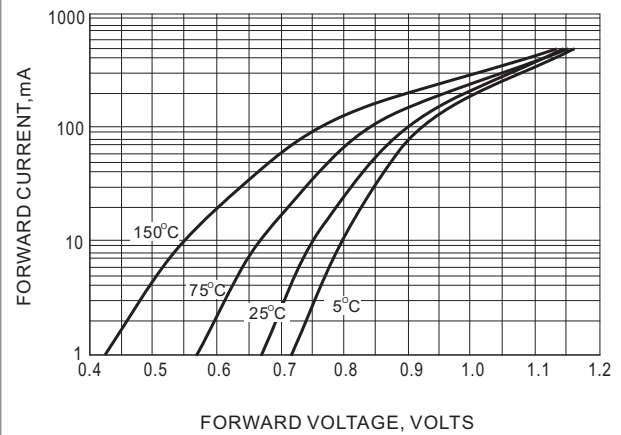


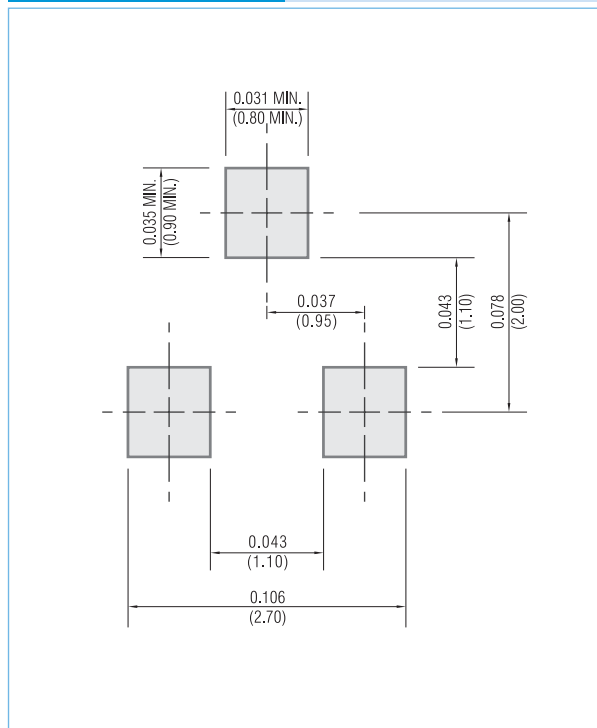
Fig.4 TYPICAL FORWARD VOLTAGE

## BZX84C2V4 SERIES

### 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

### LEGAL STATEMENT

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