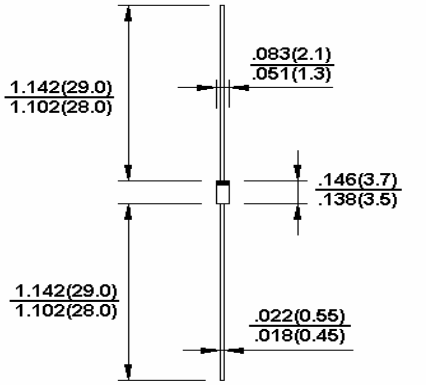
# BZX79B2V4 – BZX79B75

500 mW Hermetically Sealed Glass Zener Voltage Regulators

**DO-35**

## Features

- ✧ Zener voltage range 2.0 to 75 volts
- ✧ DO-35 package (JEDEC)
- ✧ Through-hole device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surfaces are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Solder hot(dip Tin(Sn) lead finish
- ✧ Cathode indicated by polarity band




Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

| Type Number | Symbol | Value | Units |
|---|---|---|---|
| Power Dissipation | Pd | 500 | mW |
| Maximum Forward Voltage @ IF=100mA | $V_F$ | 1.5 | V |
| Storage Temperature Range | $T_{STG}$ | -65 to + 200 | °C |
| Operating Junction Temperature | $T_J$ | + 200 | °C |

These rating are limiting values above which the serviceability of the diode may be impaired.

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## ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| Type Number | $V_Z$ @ $I_{ZT}$ (Volts) | | $I_{ZT}$ | $Z_{ZT}$ @ $I_{ZT}$ | $I_{ZK}$ | $Z_{ZK}$ @ $I_{ZK}$ | $I_R$ @ $V_R$ | $V_R$ |
|---|---|---|---|---|---|---|---|---|
| | $V_Z$ Min (V) | $V_Z$ Max (V) | mA | Ohms Max | mA | Ohms | uA Max | V |
| BZX79B2V4 | 2.35 | 2.45 | 5 | 100 | 1.0 | 600 | 100 | 1.0 |
| BZX79B2V7 | 2.65 | 2.75 | 5 | 100 | 1.0 | 600 | 75 | 1.0 |
| BZX79B3V0 | 2.94 | 3.06 | 5 | 95 | 1.0 | 600 | 50 | 1.0 |
| BZX79B3V3 | 3.23 | 3.37 | 5 | 95 | 1.0 | 600 | 25 | 1.0 |
| BZX79B3V6 | 3.53 | 3.67 | 5 | 90 | 1.0 | 600 | 15 | 1.0 |
| BZX79B3V9 | 3.82 | 3.98 | 5 | 90 | 1.0 | 600 | 10 | 1.0 |
| BZX79B4V3 | 4.21 | 4.39 | 5 | 90 | 1.0 | 600 | 5 | 1.0 |
| BZX79B4V7 | 4.61 | 4.79 | 5 | 80 | 1.0 | 500 | 3.0 | 2.0 |
| BZX79B5V1 | 5.00 | 5.2 | 5 | 60 | 1.0 | 480 | 2.0 | 2.0 |
| BZX79B5V6 | 5.49 | 5.71 | 5 | 40 | 1.0 | 400 | 1.0 | 2.0 |
| BZX79B6V2 | 6.08 | 6.32 | 5 | 10 | 1.0 | 150 | 3.0 | 4.0 |
| BZX79B6V8 | 6.66 | 6.94 | 5 | 15 | 1.0 | 80 | 2.0 | 4.0 |
| BZX79B7V5 | 7.35 | 7.65 | 5 | 15 | 1.0 | 80 | 1.0 | 5.0 |
| BZX79B8V2 | 8.04 | 8.36 | 5 | 15 | 1.0 | 80 | 0.7 | 5.0 |
| BZX79B9V1 | 8.92 | 9.28 | 5 | 15 | 1.0 | 100 | 0.5 | 6.0 |
| BZX79B10 | 9.80 | 10.2 | 5 | 20 | 1.0 | 150 | 0.2 | 7.0 |
| BZX79B11 | 10.40 | 11.22 | 5 | 20 | 1.0 | 150 | 0.1 | 8.0 |
| BZX79B12 | 11.40 | 12.24 | 5 | 25 | 1.0 | 150 | 0.1 | 8.0 |
| BZX79B13 | 12.74 | 13.26 | 5 | 30 | 1.0 | 170 | 0.1 | 8.0 |
| BZX79B15 | 14.70 | 15.30 | 5 | 30 | 1.0 | 200 | 0.05 | 10.5 |
| BZX79B16 | 15.68 | 16.32 | 5 | 40 | 1.0 | 200 | 0.05 | 11.2 |
| BZX79B18 | 17.64 | 18.36 | 5 | 45 | 1.0 | 225 | 0.05 | 12.6 |
| BZX79B20 | 19.60 | 20.40 | 5 | 55 | 1.0 | 225 | 0.05 | 14.0 |
| BZX79B22 | 21.56 | 22.44 | 5 | 55 | 1.0 | 250 | 0.05 | 15.4 |
| BZX79B24 | 23.52 | 24.48 | 5 | 70 | 1.0 | 250 | 0.05 | 16.8 |
| BZX79B27 | 26.46 | 27.54 | 2 | 80 | 0.5 | 300 | 0.05 | 18.9 |
| BZX79B30 | 29.40 | 30.60 | 2 | 80 | 0.5 | 300 | 0.05 | 21.0 |
| BZX79B33 | 32.34 | 33.66 | 2 | 80 | 0.5 | 325 | 0.05 | 23.1 |
| BZX79B36 | 35.28 | 36.72 | 2 | 90 | 0.5 | 350 | 0.05 | 25.2 |
| BZX79B39 | 38.22 | 39.78 | 2 | 130 | 0.5 | 350 | 0.05 | 27.3 |
| BZX79B43 | 42.14 | 43.86 | 2 | 150 | 0.5 | 375 | 0.05 | 30.1 |
| BZX79B47 | 46.06 | 47.94 | 2 | 170 | 0.5 | 375 | 0.05 | 32.9 |
| BZX79B51 | 49.98 | 52.02 | 2 | 180 | 0.5 | 400 | 0.05 | 35.7 |
| BZX79B56 | 54.88 | 57.12 | 2 | 200 | 0.5 | 425 | 0.05 | 39.2 |
| BZX79B62 | 60.76 | 63.24 | 2.5 | 215 | 0.5 | 430 | 0.05 | 43.4 |
| BZX79B68 | 66.64 | 69.36 | 2.5 | 240 | 0.5 | 447 | 0.05 | 47.6 |
| BZX79B75 | 73.50 | 76.50 | 2.5 | 255 | 0.5 | 470 | 0.05 | 52.5 |

**Notes:**

1. Tolerance and voltage designation, the type numbers listed have zener voltage as shown.
2. Specials available include, nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery.
3. Zener voltage ($V_Z$) measurement, the zener voltage is measured under pulse condicitons such that $T_J$ is no more than 2°C above $T_A$.
4. Zener impedance ($Z_Z$) derivaton, zener impedance is derived from the 60-cycle ac voltage, which results when an accurrent having an RMS value equal to 10% of the dc zener current ($I_{ZT}$) is superimposed to $I_{ZT}$.

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