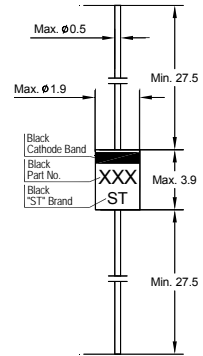


# BZX79B

## Silicon Planar Zener Diodes

### Features

- Zener Voltage Tolerance  $\pm 2\%$



Glass Case DO-35  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

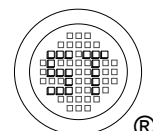
| Parameter                  | Symbol    | Value             | Unit             |
|----------------------------|-----------|-------------------|------------------|
| Continuous Forward Current | $I_F$     | 250               | mA               |
| Power Dissipation          | $P_{tot}$ | 500 <sup>1)</sup> | mW               |
| Junction Temperature       | $T_j$     | 175               | $^\circ\text{C}$ |
| Storage Temperature Range  | $T_{stg}$ | - 55 to + 175     | $^\circ\text{C}$ |

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter                                   | Symbol    | Max.              | Unit |
|---|-----------|-------------------|------|
| Thermal Resistance Junction to Ambient Air  | $R_{thA}$ | 0.3 <sup>1)</sup> | K/mW |
| Forward Voltage<br>at $I_F = 100\text{ mA}$ | $V_F$     | 1.5               | V    |

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.



# BZX79B

## Characteristics at $T_a = 25\text{ °C}$

| Type      | Zener Voltage Range <sup>1)</sup> |          |             | Dynamic Resistance |             | Reverse Leakage Current |          |
|-----------|-----------------------------------|----------|-------------|--------------------|-------------|-------------------------|----------|
|           | $V_{ZT}$                          |          | at $I_{ZT}$ | $Z_{ZT}$           | at $I_{ZT}$ | $I_R$                   | at $V_R$ |
|           | Min. (V)                          | Max. (V) | (mA)        | Max. ( $\Omega$ )  | (mA)        | Max. ( $\mu$ A)         | (V)      |
| BZX79B2V7 | 2.64                              | 2.76     | 5           | 100                | 5           | 75                      | 1        |
| BZX79B3V0 | 2.94                              | 3.06     | 5           | 95                 | 5           | 50                      | 1        |
| BZX79B3V3 | 3.23                              | 3.37     | 5           | 95                 | 5           | 25                      | 1        |
| BZX79B3V6 | 3.52                              | 3.68     | 5           | 90                 | 5           | 15                      | 1        |
| BZX79B3V9 | 3.82                              | 3.98     | 5           | 90                 | 5           | 10                      | 1        |
| BZX79B4V3 | 4.21                              | 4.39     | 5           | 90                 | 5           | 5                       | 1        |
| BZX79B4V7 | 4.6                               | 4.8      | 5           | 80                 | 5           | 3                       | 2        |
| BZX79B5V1 | 4.99                              | 5.21     | 5           | 60                 | 5           | 2                       | 2        |
| BZX79B5V6 | 5.48                              | 5.72     | 5           | 40                 | 5           | 1                       | 2        |
| BZX79B6V2 | 6.07                              | 6.33     | 5           | 10                 | 5           | 3                       | 4        |
| BZX79B6V8 | 6.66                              | 6.94     | 5           | 15                 | 5           | 2                       | 4        |
| BZX79B7V5 | 7.35                              | 7.65     | 5           | 15                 | 5           | 1                       | 5        |
| BZX79B8V2 | 8.03                              | 8.37     | 5           | 15                 | 5           | 0.7                     | 5        |
| BZX79B9V1 | 8.91                              | 9.29     | 5           | 15                 | 5           | 0.5                     | 6        |
| BZX79B10  | 9.8                               | 10.2     | 5           | 20                 | 5           | 0.2                     | 7        |
| BZX79B11  | 10.78                             | 11.22    | 5           | 20                 | 5           | 0.1                     | 8        |
| BZX79B12  | 11.76                             | 12.24    | 5           | 25                 | 5           | 0.1                     | 8        |
| BZX79B13  | 12.74                             | 13.26    | 5           | 30                 | 5           | 0.1                     | 8        |
| BZX79B15  | 14.7                              | 15.3     | 5           | 30                 | 5           | 0.05                    | 10.5     |
| BZX79B16  | 15.68                             | 16.32    | 5           | 40                 | 5           | 0.05                    | 11.2     |
| BZX79B18  | 17.64                             | 18.36    | 5           | 45                 | 5           | 0.05                    | 12.6     |
| BZX79B20  | 19.60                             | 20.4     | 5           | 55                 | 5           | 0.05                    | 14       |
| BZX79B22  | 21.56                             | 22.44    | 5           | 55                 | 5           | 0.05                    | 15.4     |
| BZX79B24  | 23.52                             | 24.48    | 5           | 70                 | 5           | 0.05                    | 16.8     |
| BZX79B27  | 26.46                             | 27.54    | 2           | 80                 | 2           | 0.05                    | 18.9     |
| BZX79B30  | 29.4                              | 30.6     | 2           | 80                 | 2           | 0.05                    | 21       |
| BZX79B33  | 32.34                             | 33.66    | 2           | 80                 | 2           | 0.05                    | 23.1     |
| BZX79B36  | 35.28                             | 36.72    | 2           | 90                 | 2           | 0.05                    | 25.2     |
| BZX79B39  | 38.22                             | 39.78    | 2           | 130                | 2           | 0.05                    | 27.3     |
| BZX79B43  | 42.14                             | 43.86    | 2           | 150                | 2           | 0.05                    | 30.1     |
| BZX79B47  | 46.06                             | 47.94    | 2           | 170                | 2           | 0.05                    | 32.9     |
| BZX79B51  | 49.98                             | 52.02    | 2           | 180                | 2           | 0.05                    | 35.7     |
| BZX79B56  | 54.88                             | 57.12    | 2           | 200                | 2           | 0.05                    | 39.2     |
| BZX79B62  | 60.76                             | 63.24    | 2           | 215                | 2           | 0.05                    | 43.4     |
| BZX79B68  | 66.64                             | 69.36    | 2           | 240                | 2           | 0.05                    | 47.6     |
| BZX79B75  | 73.5                              | 76.5     | 2           | 255                | 2           | 0.05                    | 52.5     |

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

