



Zener Diodes

| Electrical Characteristics (TC = 25°C unless otherwise specified) | | | | | | | | |
|---|--|--|---------------------------|--------------------------------|--|---|---------------------|------------------|
| Type number | Nominal Zener Voltage $V_Z@I_{ZT}$ (Volts) | Zener Test Current I_{ZT} (mA) | Max Zener Impedance | | Max DC Zener Current I_{ZM} (mA) | Typical Temp. Coeff. α_{VZ} (%/°C) | Max Reverse Current | |
| | | | $Z_{ZT}@I_{ZT}$ (Ohms) | $Z_{ZK}@5mA(I_{ZK})$ (Ohms) | | | I_R (μ A) | V_R (Volts) |
| 1N3305B | 6.8 | 1850 | 0.20 | 70 | 6600 | 0.040 | 300 | 4.5 |
| 1N3306B | 7.5 | 1700 | 0.30 | 70 | 5900 | 0.045 | 125 | 5.0 |
| 1N3307B | 8.2 | 1500 | 0.40 | 70 | 5200 | 0.048 | 50 | 5.4 |
| 1N3308B | 9.1 | 1370 | 0.50 | 70 | 4800 | 0.051 | 25 | 6.1 |
| 1N3309B | 10.0 | 1200 | 0.60 | 80 | 4300 | 0.055 | 25 | 6.7 |
| 1N3310B | 11.0 | 1100 | 0.80 | 80 | 3900 | 0.060 | 10 | 8.4 |
| 1N3311B | 12.0 | 1000 | 1.00 | 80 | 3800 | 0.065 | 10 | 9.1 |
| 1N3312B | 13.0 | 960 | 1.10 | 80 | 3300 | 0.065 | 10 | 9.9 |
| 1N3313B | 14.0 | 890 | 1.20 | 80 | 3000 | 0.070 | 10 | 11.4 |
| 1N3314B | 15.0 | 830 | 1.40 | 80 | 2800 | 0.070 | 10 | 11.4 |
| 1N3315B | 16.0 | 780 | 1.60 | 80 | 2650 | 0.070 | 10 | 12.2 |
| 1N3316B | 17.0 | 740 | 1.80 | 80 | 2500 | 0.075 | 10 | 13.0 |
| 1N3317B | 18.0 | 700 | 2.00 | 80 | 2300 | 0.075 | 10 | 13.7 |
| 1N3318B | 19.0 | 660 | 2.20 | 80 | 2200 | 0.075 | 10 | 13.7 |
| 1N3319B | 20.0 | 630 | 2.40 | 80 | 2100 | 0.075 | 10 | 15.2 |
| 1N3320B | 22.0 | 570 | 2.50 | 80 | 1900 | 0.080 | 10 | 16.7 |
| 1N3321B | 24.0 | 520 | 2.60 | 80 | 1750 | 0.080 | 10 | 18.2 |
| 1N3322B | 25.0 | 500 | 2.70 | 90 | 1550 | 0.080 | 10 | 18.2 |
| 1N3323B | 27.0 | 460 | 2.80 | 90 | 1500 | 0.085 | 10 | 20.6 |
| 1N3324B | 30.0 | 420 | 3.00 | 90 | 1400 | 0.085 | 10 | 22.8 |
| 1N3325B | 33.0 | 380 | 3.20 | 90 | 1300 | 0.085 | 10 | 25.1 |
| 1N3326B | 36.0 | 350 | 3.50 | 90 | 1150 | 0.085 | 10 | 27.4 |
| 1N3327B | 39.0 | 320 | 4.00 | 90 | 1050 | 0.090 | 10 | 29.7 |
| 1N3328B | 43.0 | 290 | 4.50 | 90 | 975 | 0.090 | 10 | 32.7 |
| 1N3329B | 45.0 | 280 | 4.50 | 100 | 930 | 0.090 | 10 | 32.7 |
| 1N3330B | 47.0 | 270 | 5.00 | 100 | 880 | 0.090 | 10 | 35.8 |
| 1N3331B | 50.0 | 250 | 5.00 | 100 | 830 | 0.090 | 10 | 36.0 |
| 1N3332B | 51.0 | 245 | 5.20 | 100 | 810 | 0.090 | 10 | 38.8 |
| 1N3333B | 52.0 | 240 | 5.50 | 100 | 790 | 0.090 | 10 | 42.6 |
| 1N3334B | 56.0 | 220 | 6.00 | 110 | 740 | 0.090 | 10 | 42.6 |
| 1N3335B | 62.0 | 200 | 7.00 | 120 | 660 | 0.090 | 10 | 47.1 |
| 1N3336B | 68.0 | 180 | 8.00 | 140 | 600 | 0.090 | 10 | 51.7 |
| 1N3337B | 75.0 | 170 | 9.00 | 150 | 540 | 0.090 | 10 | 56.0 |
| 1N3338B | 82.0 | 150 | 11.00 | 160 | 490 | 0.090 | 10 | 62.2 |
| 1N3339B | 91.0 | 140 | 15.00 | 180 | 420 | 0.090 | 10 | 69.2 |
| 1N3340B | 100.0 | 120 | 20.00 | 200 | 400 | 0.090 | 10 | 76.0 |
| 1N3341B | 105.0 | 120 | 25.00 | 210 | 380 | 0.095 | 10 | 83.0 |
| 1N3342B | 110.0 | 110 | 30.00 | 220 | 365 | 0.095 | 10 | 83.0 |
| 1N3343B | 120.0 | 100 | 40.00 | 240 | 335 | 0.095 | 10 | 91.2 |
| 1N3344B | 130.0 | 95 | 50.00 | 275 | 310 | 0.095 | 10 | 99.8 |
| 1N3345B | 140.0 | 90 | 60.00 | 325 | 290 | 0.095 | 10 | 114.0 |
| 1N3346B | 150.0 | 85 | 75.00 | 400 | 270 | 0.095 | 10 | 114.0 |
| 1N3347B | 160.0 | 80 | 80.00 | 450 | 250 | 0.095 | 10 | 121.6 |
| 1N3348B | 175.0 | 70 | 85.00 | 500 | 230 | 0.095 | 10 | 121.6 |
| 1N3349B | 180.0 | 68 | 90.00 | 525 | 220 | 0.095 | 10 | 136.8 |
| 1N3350B | 200.0 | 65 | 100.0 | 600 | 200 | 0.100 | 10 | 152.0 |

- All devices are rated at **50W**
- Zener impedance is derived from 60Hz AC voltage which results when AC current RMS value (which equals 10% of the DC zener current) is superimposed on I_Z
- Zener impedance is measured at two points on the reverse breakdown curve
- I_{ZM} values are derived for a $\pm 5\%$ V_Z tolerance

Standard voltage tolerances are $\pm 5\%$ (B suffix), $\pm 10\%$ (A suffix) & $\pm 20\%$ (no suffix)