

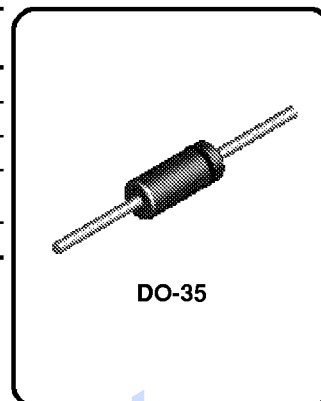
1N5226B - 1N5257B Series Half Watt Zeners

Absolute Maximum Ratings*

TA = 25°C unless otherwise noted

Tolerance: B = 5%

| Parameter | Value | Units |
|---|-------------|-------|
| Storage Temperature Range | -65 to +200 | °C |
| Maximum Junction Operating Temperature | + 200 | °C |
| Lead Temperature (1/16" from case for 10 seconds) | + 230 | °C |
| Total Device Dissipation | 500 | mW |
| Derate above 75°C | 4.0 | mW/°C |
| Surge Power** | 10 | W |



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

**Non-recurrent square wave PW= 8.3 ms, TA= 55 degrees C.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Electrical Characteristics

TA = 25°C unless otherwise noted

| Device | V _Z (V) | Z _Z (Ω) | @ | I _{ZT} (mA) | Z _{ZK} (Ω) | @ | I _{ZK} (mA) | V _R (V) | @ | I _R (μA) | T _C (%/°C) |
|----------------|-----------------------|-----------------------|---|-------------------------|------------------------|---|-------------------------|-----------------------|---|------------------------|--------------------------|
| 1N5226B | 3.3 | 28 | | 20 | 1,600 | | 0.25 | 1.0 | | 25 | - 0.07 |
| 1N5227B | 3.6 | 24 | | 20 | 1,700 | | 0.25 | 1.0 | | 15 | - 0.065 |
| 1N5228B | 3.9 | 23 | | 20 | 1,900 | | 0.25 | 1.0 | | 10 | - 0.06 |
| 1N5229B | 4.3 | 22 | | 20 | 2,000 | | 0.25 | 1.0 | | 5.0 | +/- 0.055 |
| 1N5230B | 4.7 | 19 | | 20 | 1,900 | | 0.25 | 2.0 | | 5.0 | +/- 0.03 |
| 1N5231B | 5.1 | 17 | | 20 | 1,600 | | 0.25 | 2.0 | | 5.0 | +/- 0.3 |
| 1N5232B | 5.6 | 11 | | 20 | 1,600 | | 0.25 | 3.0 | | 5.0 | 0.038 |
| 1N5233B | 6.0 | 7.0 | | 20 | 1,600 | | 0.25 | 3.5 | | 5.0 | 0.038 |
| 1N5234B | 6.2 | 7.0 | | 20 | 1,000 | | 0.25 | 4.0 | | 5.0 | 0.045 |
| 1N5235B | 6.8 | 5.0 | | 20 | 750 | | 0.25 | 5.0 | | 3.0 | 0.05 |
| 1N5236B | 7.5 | 6.0 | | 20 | 500 | | 0.25 | 6.0 | | 3.0 | 0.058 |
| 1N5237B | 8.2 | 8.0 | | 20 | 500 | | 0.25 | 6.5 | | 3.0 | 0.062 |
| 1N5238B | 8.7 | 8.0 | | 20 | 600 | | 0.25 | 6.5 | | 3.0 | 0.065 |
| 1N5239B | 9.1 | 10 | | 20 | 600 | | 0.25 | 7.0 | | 3.0 | 0.068 |
| 1N5240B | 10 | 17 | | 20 | 600 | | 0.25 | 8.0 | | 3.0 | 0.075 |
| 1N5241B | 11 | 22 | | 20 | 600 | | 0.25 | 8.4 | | 2.0 | 0.076 |
| 1N5242B | 12 | 30 | | 20 | 600 | | 0.25 | 9.1 | | 1.0 | 0.077 |

V_F Forward Voltage = 1.1 V Maximum @ I_F = 200 mA for all 1N5200 series

NOTE: National preferred devices in **BOLD**

Series Zener
(continued)

Electrical Characteristics (continued) TA = 25°C unless otherwise noted

| Device | V _Z (V) | Z _Z (Ω) | @ | I _{ZT} (mA) | Z _{ZK} (Ω) | @ | I _{ZK} (mA) | V _R (V) | @ | I _R (nA) | T _C (%/°C) |
|----------------|-----------------------|-----------------------|---|-------------------------|------------------------|---|-------------------------|-----------------------|---|------------------------|--------------------------|
| 1N5243B | 13 | 13 | | 9.5 | 600 | | 0.25 | 9.9 | | 500 | 0.079 |
| 1N5244B | 14 | 15 | | 9.0 | 600 | | 0.25 | 10 | | 100 | 0.082 |
| 1N5245B | 15 | 16 | | 8.5 | 600 | | 0.25 | 11 | | 100 | 0.082 |
| 1N5246B | 16 | 17 | | 7.8 | 600 | | 0.25 | 12 | | 100 | 0.083 |
| 1N5247B | 17 | 19 | | 7.4 | 600 | | 0.25 | 13 | | 100 | 0.084 |
| 1N5248B | 18 | 21 | | 7.0 | 600 | | 0.25 | 14 | | 100 | 0.085 |
| 1N5249B | 19 | 23 | | 6.6 | 600 | | 0.25 | 14 | | 100 | 0.086 |
| 1N5250B | 20 | 25 | | 6.2 | 600 | | 0.25 | 15 | | 100 | 0.086 |
| 1N5251B | 22 | 29 | | 5.6 | 600 | | 0.25 | 17 | | 100 | 0.087 |
| 1N5252B | 24 | 33 | | 5.2 | 600 | | 0.25 | 18 | | 100 | 0.088 |
| 1N5253B | 25 | 35 | | 5.0 | 600 | | 0.25 | 19 | | 100 | 0.089 |
| 1N5254B | 27 | 41 | | 4.6 | 600 | | 0.25 | 21 | | 100 | 0.090 |
| 1N5255B | 28 | 44 | | 4.5 | 600 | | 0.25 | 21 | | 100 | 0.091 |
| 1N5256B | 30 | 49 | | 4.2 | 600 | | 0.25 | 23 | | 100 | 0.091 |
| 1N5257B | 33 | 58 | | 3.8 | 700 | | 0.25 | 25 | | 100 | 0.092 |

V_F Forward Voltage = 1.1 V Maximum @ I_F = 200 mA for all 1N5200 series

NOTE: National preferred devices in **BOLD**

1N5226B - 1N5257B Series

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