



1N5221B~1N5267B

Zener diode

Voltage Range
2.4 to 75 Volts

Features

- 1.High reliability
- 2.Very sharp reverse characteristic
- 3.Low reverse current level
- 4.Vz-tolerance±5%

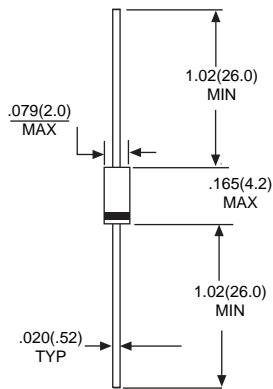
Applications

Voltage stabilization

Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

DO-35



Dimensions in inches and (millimeters)

| Parameter | Test Conditions | Type | Symbol | Value | Unit |
|---------------------------|--------------------------------|------|-----------|-----------|--------------------|
| Power dissipation | $T_{amb} * 75^{\circ}\text{C}$ | | P_D | 500 | mW |
| Z-current | | | I_z | P_D/V_z | mA |
| Junction temperature | | | T_j | 200 | $^{\circ}\text{C}$ |
| Storage temperature range | | | T_{stg} | -65~+200 | $^{\circ}\text{C}$ |

Maximum Thermal Resistance

$T_j=25^{\circ}\text{C}$

| Parameter | Test Conditions | Symbol | Value | Unit |
|------------------|--|------------|-------|------|
| Junction ambient | $l=9.5\text{mm}(3/8") T_L=\text{constant}$ | R_{thJA} | 300 | K/W |

Electrcal Characteristics

$T_j=25^{\circ}\text{C}$

| Parameter | Test Conditions | Type | Symbol | Min | Typ | Max | Unit |
|-----------------|--------------------|------|--------|-----|-----|-----|------|
| Forward voltage | $I_F=200\text{mA}$ | | V_F | | | 1.1 | V |



| Type | Vznom | | Izt for Vz and Rzt | | Rzk at Izk | | IR at VR | | TKVz |
|---------|-------|-----|--------------------|-------|------------|------|----------|---------|------|
| | V | mA | * | * | mA | uA | V | %/K | |
| 1N5221B | 2.4 | 20 | <30 | <1200 | 0.25 | <100 | 1.0 | <-0.085 | |
| 1N5222B | 2.5 | 20 | <30 | <1250 | 0.25 | <100 | 1.0 | <-0.085 | |
| 1N5223B | 2.7 | 20 | <30 | <1300 | 0.25 | <75 | 1.0 | <-0.080 | |
| 1N5224B | 2.8 | 20 | <30 | <1400 | 0.25 | <75 | 1.0 | <-0.080 | |
| 1N5225B | 3.0 | 20 | <29 | <1600 | 0.25 | <50 | 1.0 | <-0.075 | |
| 1N5226B | 3.3 | 20 | <28 | <1600 | 0.25 | <25 | 1.0 | <-0.070 | |
| 1N5227B | 3.6 | 20 | <24 | <1700 | 0.25 | <15 | 1.0 | <-0.065 | |
| 1N5228B | 3.9 | 20 | <23 | <1900 | 0.25 | <10 | 1.0 | <-0.060 | |
| 1N5229B | 4.3 | 20 | <22 | <2000 | 0.25 | <5 | 1.0 | <+0.055 | |
| 1N5230B | 4.7 | 20 | <19 | <1900 | 0.25 | <5 | 2.0 | <+0.030 | |
| 1N5231B | 5.1 | 20 | <17 | <1600 | 0.25 | <5 | 2.0 | <+0.030 | |
| 1N5232B | 5.6 | 20 | <11 | <1600 | 0.25 | <5 | 3.0 | <+0.038 | |
| 1N5233B | 6.0 | 20 | <7 | <1600 | 0.25 | <5 | 3.5 | <+0.038 | |
| 1N5234B | 6.2 | 20 | <7 | <1000 | 0.25 | <5 | 4.0 | <+0.045 | |
| 1N5235B | 6.8 | 20 | <5 | <750 | 0.25 | <3<3 | 5.0 | <+0.050 | |
| 1N5236B | 7.5 | 20 | <6 | <500 | 0.25 | <3 | 6.0 | <+0.058 | |
| 1N5237B | 8.2 | 20 | <8 | <500 | 0.25 | <3 | 6.5 | <+0.062 | |
| 1N5238B | 8.7 | 20 | <8 | <600 | 0.25 | <3 | 6.5 | <+0.065 | |
| 1N5239B | 9.1 | 20 | <10 | <600 | 0.25 | <3 | 7.0 | <+0.068 | |
| 1N5240B | 10 | 20 | <17 | <600 | 0.25 | <2 | 8.0 | <+0.075 | |
| 1N5241B | 11 | 20 | <22 | <600 | 0.25 | <1 | 8.4 | <+0.076 | |
| 1N5242B | 12 | 20 | <30 | <600 | 0.25 | <0.5 | 9.1 | <+0.077 | |
| 1N5243B | 13 | 9.5 | <13 | <600 | 0.25 | <0.1 | 9.9 | <+0.079 | |
| 1N5244B | 14 | 9.0 | <15 | <600 | 0.25 | <0.1 | 10 | <+0.082 | |
| 1N5245B | 15 | 8.5 | <16 | <600 | 0.25 | <0.1 | 11 | <+0.082 | |
| 1N5246B | 16 | 7.8 | <17 | <600 | 0.25 | <0.1 | 12 | <+0.083 | |
| 1N5247B | 17 | 7.4 | <19 | <600 | 0.25 | <0.1 | 13 | <+0.084 | |
| 1N5248B | 18 | 7.0 | <21 | <600 | 0.25 | <0.1 | 14 | <+0.085 | |
| 1N5249B | 19 | 6.6 | <23 | <600 | 0.25 | <0.1 | 15 | <+0.086 | |
| 1N5250B | 20 | 6.2 | <25 | <600 | 0.25 | <0.1 | 16 | <+0.086 | |
| 1N5251B | 22 | 5.6 | <39 | <600 | 0.25 | <0.1 | 17 | <+0.087 | |
| 1N5252B | 24 | 5.2 | <33 | <600 | 0.25 | <0.1 | 18 | <+0.088 | |
| 1N5253B | 25 | 5.0 | <35 | <600 | 0.25 | <0.1 | 19 | <+0.089 | |
| 1N5254B | 27 | 4.6 | <41 | <600 | 0.25 | <0.1 | 21 | <+0.090 | |
| 1N5255B | 28 | 4.5 | <44 | <600 | 0.25 | <0.1 | 21 | <+0.091 | |
| 1N5256B | 30 | 4.2 | <49 | <600 | 0.25 | <0.1 | 23 | <+0.091 | |
| 1N5257B | 33 | 3.8 | <58 | <700 | 0.25 | <0.1 | 25 | <+0.092 | |
| 1N5258B | 36 | 3.4 | <70 | <700 | 0.25 | <0.1 | 27 | <+0.093 | |
| 1N5259B | 39 | 3.2 | <80 | <800 | 0.25 | <0.1 | 30 | <+0.094 | |
| 1N5260B | 43 | 3.0 | <93 | <900 | 0.25 | <0.1 | 33 | <+0.095 | |
| 1N5261B | 47 | 2.7 | <105 | <1000 | 0.25 | <0.1 | 36 | <+0.095 | |
| 1N5262B | 51 | 2.5 | <125 | <1100 | 0.25 | <0.1 | 39 | <+0.096 | |
| 1N5263B | 56 | 2.2 | <150 | <1300 | 0.25 | <0.1 | 43 | <+0.096 | |
| 1N5264B | 60 | 2.1 | <170 | <1400 | 0.25 | <0.1 | 46 | <+0.097 | |
| 1N5265B | 62 | 2.0 | <185 | <1400 | 0.25 | <0.1 | 47 | <+0.097 | |
| 1N5266B | 68 | 1.8 | <230 | <1600 | 0.25 | <0.1 | 52 | <+0.097 | |
| 1N5267B | 75 | 1.7 | <270 | <1700 | 0.25 | <0.1 | 58 | <+0.098 | |

1)Based on DC-measurement at thermal equilibrium while maintaining the lead temperature (TL)at 30°C, 9.5mm(3/8") from the diode body.