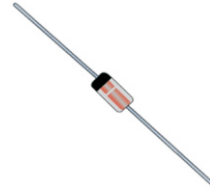


1N5221B-G Thru. 1N5267B-G

Voltage: 2.4 to 75 Volts

Power: 0.5 Watts

RoHS Device

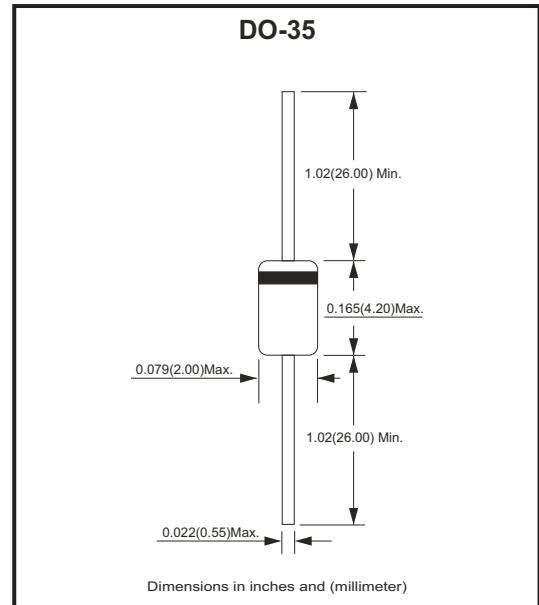


Features

- 500mW power dissipation
- Stabilizing voltage.

Mechanical data

- Case: Glass, DO-35
- Polarity: Indicated by cathode band



Maximum Ratings (TA=25°C, unless otherwise noted)

| Parameter | Conditions | Symbol | Value | Unit |
|---------------------------|------------|------------------|----------------------------------|------|
| Power dissipation | TL=25°C | P _{tot} | 500 | mW |
| Zener current | | I _z | P _{tot} /V _z | mA |
| Junction temperature | | T _J | 175 | °C |
| Storage temperature range | | T _{STG} | -65 to +175 | °C |

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

| Parameter | Conditions | Symbol | Max | Unit |
|-----------------------------|---|------------------|-----|------|
| Thermal resistance (Note 1) | junction to ambient air L=4mm, TL=25°C | R _{θJA} | 300 | °C/W |
| Forward voltage | I _F =200mA | V _F | 1.1 | V |

Note: Based on dc-measurement at thermal equilibrium; lead length = 9.5 (3/8"); thermal resistance of heat sink =30°C/W

Axial Leaded Glass Zener Diode



Electrical Characteristics (1N5221B-G Thru. 1N5267B-G)

| Part No. | Nominal Zener Voltage ⁽¹⁾ | Maximum dynamic Impedance resistance | | | | Maximum Reverse Leakage Current | | Temperature of Coefficient | Marking Code |
|-----------|--------------------------------------|--------------------------------------|-----|-----------|------|---------------------------------|-----|----------------------------|--------------|
| | Vz @ IzT | ZzT @ IzT | | Zzk @ Izk | | IR @ VR | | @ IzT | |
| | V | Ω | mA | Ω | mA | μA | V | α(%/K) | |
| 1N5221B-G | 2.4 | 30 | 20 | 1200 | 0.25 | 100 | 1 | -0.085 | 1N5221B |
| 1N5222B-G | 2.5 | 30 | 20 | 1250 | 0.25 | 100 | 1 | -0.085 | 1N5222B |
| 1N5223B-G | 2.7 | 30 | 20 | 1300 | 0.25 | 75 | 1 | -0.080 | 1N5223B |
| 1N5224B-G | 2.8 | 30 | 20 | 1400 | 0.25 | 75 | 1 | -0.080 | 1N5224B |
| 1N5225B-G | 3.0 | 29 | 20 | 1600 | 0.25 | 50 | 1 | -0.075 | 1N5225B |
| 1N5226B-G | 3.3 | 28 | 20 | 1600 | 0.25 | 25 | 1 | -0.070 | 1N5226B |
| 1N5227B-G | 3.6 | 24 | 20 | 1700 | 0.25 | 15 | 1 | -0.065 | 1N5227B |
| 1N5228B-G | 3.9 | 23 | 20 | 1900 | 0.25 | 10 | 1 | -0.060 | 1N5228B |
| 1N5229B-G | 4.3 | 22 | 20 | 2000 | 0.25 | 5 | 1 | +0.055 | 1N5229B |
| 1N5230B-G | 4.7 | 19 | 20 | 1900 | 0.25 | 5 | 2 | +0.030 | 1N5230B |
| 1N5231B-G | 5.1 | 17 | 20 | 1600 | 0.25 | 5 | 2 | +0.030 | 1N5231B |
| 1N5232B-G | 5.6 | 11 | 20 | 1600 | 0.25 | 5 | 3 | +0.038 | 1N5232B |
| 1N5233B-G | 6.0 | 7 | 20 | 1600 | 0.25 | 5 | 3.5 | +0.038 | 1N5233B |
| 1N5234B-G | 6.2 | 7 | 20 | 1000 | 0.25 | 5 | 4 | +0.045 | 1N5234B |
| 1N5235B-G | 6.8 | 5 | 20 | 750 | 0.25 | 3 | 5 | +0.050 | 1N5235B |
| 1N5236B-G | 7.5 | 6 | 20 | 500 | 0.25 | 3 | 6 | +0.058 | 1N5236B |
| 1N5237B-G | 8.2 | 8 | 20 | 500 | 0.25 | 3 | 6.5 | +0.062 | 1N5237B |
| 1N5238B-G | 8.7 | 8 | 20 | 600 | 0.25 | 3 | 6.5 | +0.065 | 1N5238B |
| 1N5239B-G | 9.1 | 10 | 20 | 600 | 0.25 | 3 | 7 | +0.068 | 1N5239B |
| 1N5240B-G | 10 | 17 | 20 | 600 | 0.25 | 3 | 8 | +0.075 | 1N5240B |
| 1N5241B-G | 11 | 22 | 20 | 600 | 0.25 | 2 | 8.4 | +0.076 | 1N5241B |
| 1N5242B-G | 12 | 30 | 20 | 600 | 0.25 | 1 | 9.1 | +0.077 | 1N5242B |
| 1N5243B-G | 13 | 13 | 9.5 | 600 | 0.25 | 0.5 | 9.9 | +0.079 | 1N5243B |
| 1N5244B-G | 14 | 15 | 9 | 600 | 0.25 | 0.1 | 10 | +0.082 | 1N5244B |
| 1N5245B-G | 15 | 16 | 8.5 | 600 | 0.25 | 0.1 | 11 | +0.082 | 1N5245B |
| 1N5246B-G | 16 | 17 | 7.8 | 600 | 0.25 | 0.1 | 12 | +0.083 | 1N5246B |
| 1N5247B-G | 17 | 19 | 7.4 | 600 | 0.25 | 0.1 | 13 | +0.084 | 1N5247B |
| 1N5248B-G | 18 | 21 | 7 | 600 | 0.25 | 0.1 | 14 | +0.085 | 1N5248B |
| 1N5249B-G | 19 | 23 | 6.6 | 600 | 0.25 | 0.1 | 14 | +0.086 | 1N5249B |
| 1N5250B-G | 20 | 25 | 6.2 | 600 | 0.25 | 0.1 | 15 | +0.086 | 1N5250B |
| 1N5251B-G | 22 | 29 | 5.6 | 600 | 0.25 | 0.1 | 17 | +0.087 | 1N5251B |
| 1N5252B-G | 24 | 33 | 5.2 | 600 | 0.25 | 0.1 | 18 | +0.088 | 1N5252B |
| 1N5253B-G | 25 | 35 | 5 | 600 | 0.25 | 0.1 | 19 | +0.089 | 1N5253B |
| 1N5254B-G | 27 | 41 | 4.6 | 600 | 0.25 | 0.1 | 21 | +0.090 | 1N5254B |
| 1N5255B-G | 28 | 44 | 4.5 | 600 | 0.25 | 0.1 | 21 | +0.091 | 1N5255B |
| 1N5256B-G | 30 | 49 | 4.2 | 600 | 0.25 | 0.1 | 23 | +0.091 | 1N5256B |
| 1N5257B-G | 33 | 58 | 3.8 | 700 | 0.25 | 0.1 | 25 | +0.092 | 1N5257B |
| 1N5258B-G | 36 | 70 | 3.4 | 700 | 0.25 | 0.1 | 27 | +0.093 | 1N5258B |
| 1N5259B-G | 39 | 80 | 3.2 | 800 | 0.25 | 0.1 | 30 | +0.094 | 1N5259B |
| 1N5260B-G | 43 | 93 | 3 | 900 | 0.25 | 0.1 | 33 | +0.095 | 1N5260B |
| 1N5261B-G | 47 | 105 | 2.7 | 1000 | 0.25 | 0.1 | 36 | +0.095 | 1N5261B |
| 1N5262B-G | 51 | 125 | 2.5 | 1100 | 0.25 | 0.1 | 39 | +0.096 | 1N5262B |
| 1N5263B-G | 56 | 150 | 2.2 | 1300 | 0.25 | 0.1 | 43 | +0.096 | 1N5263B |
| 1N5264B-G | 60 | 170 | 2.1 | 1400 | 0.25 | 0.1 | 46 | +0.097 | 1N5264B |
| 1N5265B-G | 62 | 185 | 2 | 1400 | 0.25 | 0.1 | 47 | +0.097 | 1N5265B |
| 1N5266B-G | 68 | 230 | 1.8 | 1600 | 0.25 | 0.1 | 52 | +0.097 | 1N5266B |
| 1N5267B-G | 75 | 270 | 1.7 | 1700 | 0.25 | 0.1 | 56 | +0.098 | 1N5267B |

Note:(1) Based on DC measurement at thermal equilibrium; lead length=9.5(3/8"); thermal resistance of heat sink=30°C/W

Company reserves the right to improve product design , functions and reliability without notice.

REV: C

RATING AND CHARACTERISTIC CURVES (1N5221B-G Thru. 1N5267B-G)

Fig.1 - Power Derating Curve

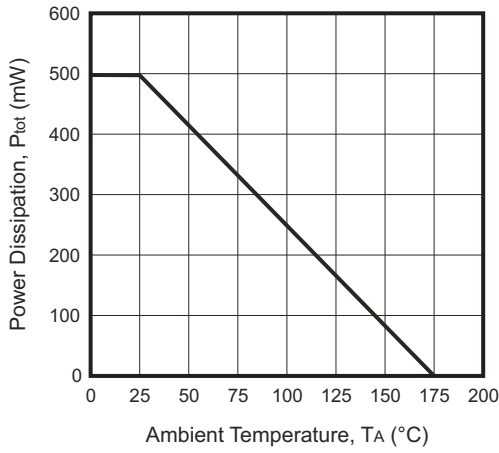


Fig.2 - Thermal Resistance vs. Lead Length

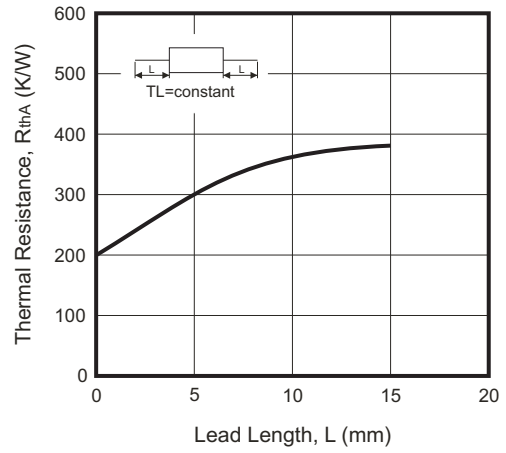


Fig.3 - Forward Current vs. Forward Voltage

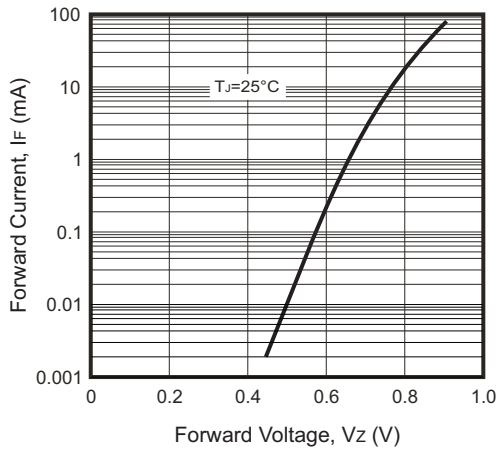


Fig.4 - Differential Z-Resistance vs. Z-Voltage

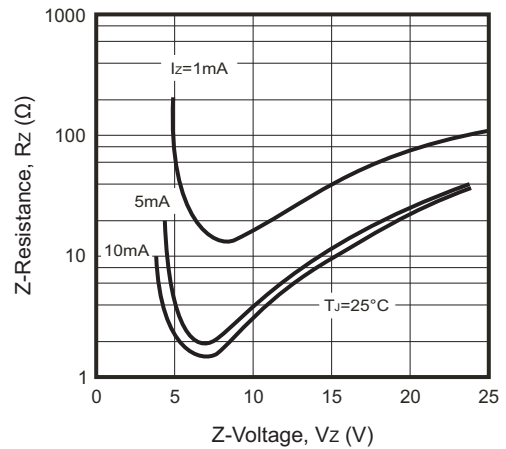


Fig.5 - Z-Current vs. Z-Voltage

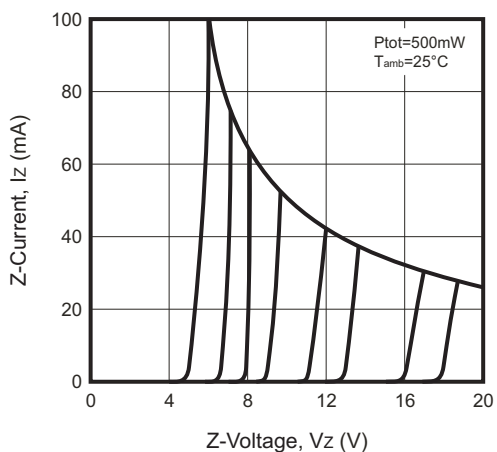
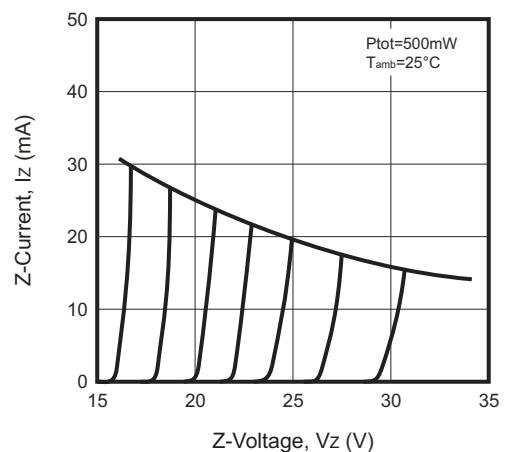
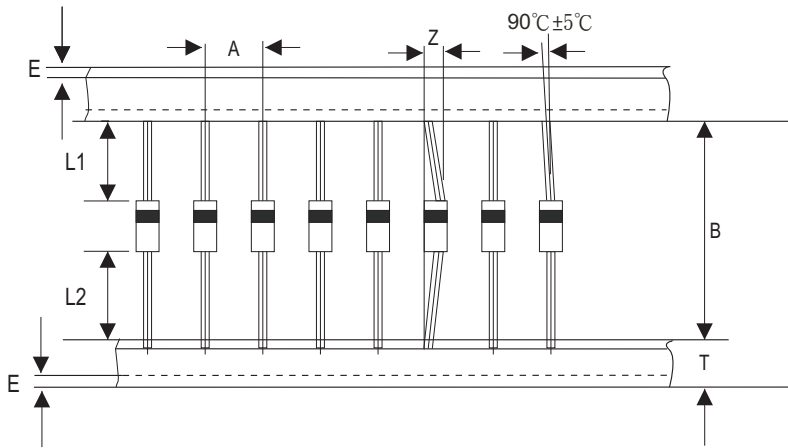


Fig.6 - Z-Current vs. Z-Voltage



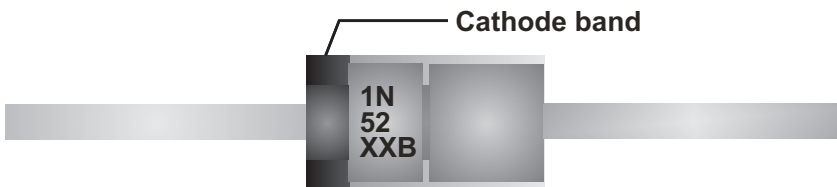
Taping Specification For Axial Lead Diodes



| DO-35 | SYMBOL | A | B | Z | T | E | L1-L2 |
|-------|--------|---------------|---------------|-------------|---------------|-------------|-------------|
| | (mm) | 5.00 ± 0.5 | 52.0 ± 1.5 | 1.2 (max) | 6.0 ± 0.4 | 0.8 (max) | 1.0 (max) |
| | (inch) | 0.197 ± 0.020 | 2.047 ± 0.059 | 0.047 (max) | 0.236 ± 0.016 | 0.032 (max) | 0.039 (max) |

Marking Code

| Part Number | Marking Code |
|---------------------|--------------|
| 1N5221-G ~ 1N5267-G | 1N52XXB |



XX : Product type marking code (see page.4)

Standard Packaging

| Case Type | AMMO PACK | |
|-----------|----------------|-------------------|
| | BOX (pcs) | CARTON (pcs) |
| DO-35 | 5,000 | 100,000 |

Company reserves the right to improve product design , functions and reliability without notice.