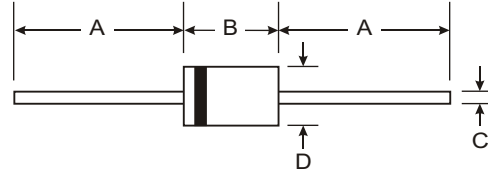


### Features

- 500mW Power Dissipation
- High Stability
- Low Noise
- Surface Mount Equivalents Available
- Hermetic Package
- $V_z$  - Tolerance  $\pm 5\%$



### Mechanical Data

- Case: DO-35, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.13 grams (approx.)

| DO-35                |       |      |
|----------------------|-------|------|
| Dim                  | Min   | Max  |
| A                    | 25.40 | —    |
| B                    | —     | 4.00 |
| C                    | —     | 0.60 |
| D                    | —     | 2.00 |
| All Dimensions in mm |       |      |

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic                                       | Symbol          | Value       | Unit                      |
|--|-----------------|-------------|---------------------------|
| Power Dissipation (Note 1)                           | $P_d$           | 500         | mW                        |
| Thermal Resistance, Junction to Ambient Air (Note 1) | $R_{\theta JA}$ | 300         | $^\circ\text{C}/\text{W}$ |
| Forward Voltage @ $I_F = 200\text{mA}$               | $V_F$           | 1.1         | V                         |
| Operating and Storage Temperature Range              | $T_j, T_{STG}$  | -65 to +200 | $^\circ\text{C}$          |

Notes: 1. Valid provided that leads are kept at  $T_L \leq 75^\circ\text{C}$  with lead length = 9.5mm (3/8") from case; derate above  $75^\circ\text{C}$ .

**Electrical Characteristics** @ T<sub>A</sub> = 25°C unless otherwise specified

| Type Number | Zener Voltage Range (Note 2)     |         |         | Test Current    | Maximum Zener Impedance           |  | Maximum Reverse Current |                 | Maximum Temperature Coefficient @ I <sub>ZT</sub> |
|-------------|----------------------------------|---------|---------|-----------------|-----------------------------------|--|-------------------------|-----------------|---|
|             | V <sub>Z</sub> @ I <sub>ZT</sub> |         |         | I <sub>ZT</sub> | Z <sub>ZT</sub> @ I <sub>ZT</sub> | Z <sub>ZK</sub> @ I <sub>ZK</sub> = 0.25mA | I <sub>R</sub>          | @V <sub>R</sub> |   |
|             | Nom (V)                          | Min (V) | Max (V) | mA              | Ω                                 | Ω  | μA                      | V               | %/°C  |
| 1N5221B     | 2.4                              | 2.28    | 2.52    | 20              | 30                                | 1200                                       | 100                     | 1.0             | -0.085  |
| 1N5222B     | 2.5                              | 2.38    | 2.63    | 20              | 30                                | 1250                                       | 100                     | 1.0             | -0.085  |
| 1N5223B     | 2.7                              | 2.57    | 2.84    | 20              | 30                                | 1300                                       | 75                      | 1.0             | -0.080  |
| 1N5224B     | 2.8                              | 2.66    | 2.94    | 20              | 30                                | 1400                                       | 75                      | 1.0             | -0.080  |
| 1N5225B     | 3.0                              | 2.85    | 3.15    | 20              | 29                                | 1600                                       | 50                      | 1.0             | -0.075  |
| 1N5226B     | 3.3                              | 3.14    | 3.47    | 20              | 28                                | 1600                                       | 25                      | 1.0             | -0.070  |
| 1N5227B     | 3.6                              | 3.42    | 3.78    | 20              | 24                                | 1700                                       | 15                      | 1.0             | -0.065  |
| 1N5228B     | 3.9                              | 3.71    | 4.10    | 20              | 23                                | 1900                                       | 10                      | 1.0             | -0.060  |
| 1N5229B     | 4.3                              | 4.09    | 4.52    | 20              | 22                                | 2000                                       | 5.0                     | 1.0             | +0.055  |
| 1N5230B     | 4.7                              | 4.47    | 4.94    | 20              | 19                                | 1900                                       | 5.0                     | 2.0             | +0.030  |
| 1N5231B     | 5.1                              | 4.85    | 5.36    | 20              | 17                                | 1600                                       | 5.0                     | 2.0             | +0.030  |
| 1N5232B     | 5.6                              | 5.32    | 5.88    | 20              | 11                                | 1600                                       | 5.0                     | 3.0             | +0.038  |
| 1N5233B     | 6.0                              | 5.70    | 6.30    | 20              | 7.0                               | 1600                                       | 5.0                     | 3.5             | +0.038  |
| 1N5234B     | 6.2                              | 5.89    | 6.51    | 20              | 7.0                               | 1000                                       | 5.0                     | 4.0             | +0.045  |
| 1N5235B     | 6.8                              | 6.46    | 7.14    | 20              | 5.0                               | 750  | 3.0                     | 5.0             | +0.050  |
| 1N5236B     | 7.5                              | 7.13    | 7.88    | 20              | 6.0                               | 500  | 3.0                     | 6.0             | +0.058  |
| 1N5237B     | 8.2                              | 7.79    | 8.61    | 20              | 8.0                               | 500  | 3.0                     | 6.5             | +0.062  |
| 1N5238B     | 8.7                              | 8.27    | 9.14    | 20              | 8.0                               | 600  | 3.0                     | 6.5             | +0.065  |
| 1N5239B     | 9.1                              | 8.65    | 9.56    | 20              | 10                                | 600  | 3.0                     | 7.0             | +0.068  |
| 1N5240B     | 10                               | 9.50    | 10.50   | 20              | 17                                | 600  | 3.0                     | 8.0             | +0.075  |
| 1N5241B     | 11                               | 10.45   | 11.55   | 20              | 22                                | 600  | 2.0                     | 8.4             | +0.076  |
| 1N5242B     | 12                               | 11.40   | 12.60   | 20              | 30                                | 600  | 1.0                     | 9.1             | +0.077  |
| 1N5243B     | 13                               | 12.35   | 13.65   | 9.5             | 13                                | 600  | 0.5                     | 9.9             | +0.079  |
| 1N5244B     | 14                               | 13.30   | 14.70   | 9.0             | 15                                | 600  | 0.1                     | 10              | +0.082  |
| 1N5245B     | 15                               | 14.25   | 15.75   | 8.5             | 16                                | 600  | 0.1                     | 11              | +0.082  |
| 1N5246B     | 16                               | 15.20   | 16.80   | 7.8             | 17                                | 600  | 0.1                     | 12              | +0.083  |
| 1N5247B     | 17                               | 16.15   | 17.85   | 7.4             | 19                                | 600  | 0.1                     | 13              | +0.084  |
| 1N5248B     | 18                               | 17.10   | 18.90   | 7.0             | 21                                | 600  | 0.1                     | 14              | +0.085  |
| 1N5249B     | 19                               | 18.05   | 19.95   | 6.6             | 23                                | 600  | 0.1                     | 14              | +0.086  |
| 1N5250B     | 20                               | 19.00   | 21.00   | 6.2             | 25                                | 600  | 0.1                     | 15              | +0.086  |
| 1N5251B     | 22                               | 20.90   | 23.10   | 5.6             | 29                                | 600  | 0.1                     | 17              | +0.087  |
| 1N5252B     | 24                               | 22.80   | 25.20   | 5.2             | 33                                | 600  | 0.1                     | 18              | +0.087  |
| 1N5253B     | 25                               | 23.75   | 26.25   | 5.0             | 35                                | 600  | 0.1                     | 19              | +0.089  |
| 1N5254B     | 27                               | 25.65   | 28.35   | 4.6             | 41                                | 600  | 0.1                     | 21              | +0.090  |
| 1N5255B     | 28                               | 26.60   | 29.40   | 4.5             | 44                                | 600  | 0.1                     | 21              | +0.091  |
| 1N5256B     | 30                               | 28.50   | 31.50   | 4.2             | 49                                | 600  | 0.1                     | 23              | +0.091  |
| 1N5257B     | 33                               | 31.35   | 34.65   | 3.8             | 58                                | 700  | 0.1                     | 25              | +0.092  |
| 1N5258B     | 36                               | 34.20   | 37.80   | 3.4             | 70                                | 700  | 0.1                     | 27              | +0.093  |
| 1N5259B     | 39                               | 37.05   | 40.95   | 3.2             | 80                                | 800  | 0.1                     | 30              | +0.094  |
| 1N5260B     | 43                               | 40.85   | 45.15   | 3.0             | 93                                | 900  | 0.1                     | 33              | +0.095  |
| 1N5261B     | 47                               | 44.65   | 49.35   | 2.7             | 105                               | 1000                                       | 0.1                     | 36              | +0.095  |
| 1N5262B     | 51                               | 48.45   | 53.55   | 2.5             | 125                               | 1100                                       | 0.1                     | 39              | +0.096  |
| 1N5263B     | 56                               | 53.20   | 58.80   | 2.2             | 150                               | 1300                                       | 0.1                     | 43              | +0.096  |
| 1N5264B     | 60                               | 57.00   | 63.00   | 2.1             | 170                               | 1400                                       | 0.1                     | 46              | +0.097  |
| 1N5265B     | 62                               | 58.90   | 65.10   | 2.0             | 185                               | 1400                                       | 0.1                     | 47              | +0.097  |
| 1N5266B     | 68                               | 64.60   | 71.40   | 1.8             | 230                               | 1600                                       | 0.1                     | 52              | +0.097  |
| 1N5267B     | 75                               | 71.25   | 78.75   | 1.7             | 270                               | 1700                                       | 0.1                     | 56              | +0.098  |

Notes: 2. Based on dc measurement at thermal equilibrium; lead length = 9.5mm (3/8"); thermal resistance of heat sink = 30°C/W.