

500mW 5% DO-35 ZENER DIODE

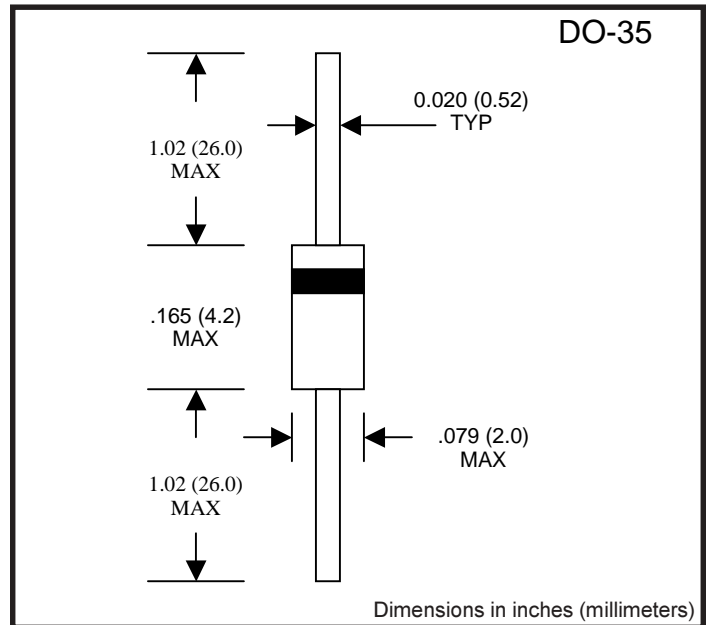
Absolute Maximum Ratings (Ta=25°C)

| Items | Symbol | Ratings | Unit |
|---|------------------|------------|------|
| Power Dissipation | P _{TOT} | 500 | mW |
| Power Derating above 75°C | | 4 | K/mW |
| Forward Voltage @I _f = 10 mA | V _f | 1.2 | V |
| V _z Tolerance | | 5 | % |
| Junction Temp. | T _J | -65 to 175 | °C |
| Storage Temp. | T _{STG} | -65 to 175 | °C |

Mechanical Data

| Items | Materials |
|-------------|----------------------------|
| Package | DO-35 |
| Case | Hermetically sealed glass |
| Lead Finish | Double Stud/Solder Plating |
| Chip | Glass Passivated |

Dimensions



Electrical Characteristics (Ta=25°C)

| Type | ZENER VOLTAGE | Max ZENER IMPEDANCE | Max ZENER IMPEDANCE | Max ZENER IMPEDANCE | Max REVERSE CURRENT | | TEMP. COEFF. |
|--------|--------------------|---------------------|---------------------|--|---------------------|---------------------|--------------|
| | V _Z (V) | I _{ZT} (m) | R _Z (Ω) | I _{ZT} = 0.25mA R _Z (Ω) | V _R (V) | I _R (μA) | |
| 1N5223 | 2.7 | 20 | 30 | 1300 | 0.95 | 75 | -0.080 |
| 1N5224 | 2.8 | 20 | 30 | 1400 | 0.95 | 75 | -0.080 |
| 1N5225 | 3.0 | 20 | 29 | 1600 | 0.95 | 50 | -0.075 |
| 1N5226 | 3.3 | 20 | 28 | 1600 | 0.95 | 25 | -0.070 |
| 1N5227 | 3.6 | 20 | 24 | 1700 | 0.95 | 15 | -0.065 |
| 1N5228 | 3.9 | 20 | 23 | 1900 | 0.95 | 10 | -0.060 |
| 1N5229 | 4.3 | 20 | 22 | 2000 | 0.95 | 5.0 | +0.055 |
| 1N5230 | 4.7 | 20 | 19 | 1900 | 1.9 | 5.0 | +0.030 |
| 1N5231 | 5.1 | 20 | 17 | 1600 | 1.9 | 5.0 | +0.030 |
| 1N5232 | 5.6 | 20 | 11 | 1600 | 2.9 | 5.0 | +0.038 |
| 1N5233 | 6.0 | 20 | 7.0 | 1600 | 3.3 | 5.0 | +0.038 |
| 1N5234 | 6.2 | 20 | 7.0 | 1000 | 3.8 | 5.0 | +0.045 |
| 1N5235 | 6.8 | 20 | 5.0 | 750 | 4.8 | 3.0 | +0.050 |
| 1N5236 | 7.5 | 20 | 6.0 | 500 | 5.7 | 3.0 | +0.058 |
| 1N5237 | 8.2 | 20 | 8.0 | 500 | 6.2 | 3.0 | +0.062 |

| Type | ZENER VOLTAGE | Max ZENER IMPEDANCE | Max ZENER IMPEDANCE | Max ZENER IMPEDANCE | Max REVERSE CURRENT | | TEMP. COEFF. |
|--------|------------------|------------------------|------------------------|---|------------------------|-------------------|---------------------------|
| | V_Z (V) | $I_{ZT}(m)$ | R_Z (Ω) | $I_{ZT} = 0.25mA$ R_Z (Ω) | V_R (V) | I_R (μA) | dv_z (% / $^{\circ}C$) |
| 1N5238 | 8.7 | 20 | 8.0 | 600 | 6.2 | 3.0 | +0.065 |
| 1N5239 | 9.1 | 20 | 10 | 600 | 6.7 | 3.0 | +0.068 |
| 1N5240 | 10 | 20 | 17 | 600 | 7.6 | 3.0 | +0.075 |
| 1N5241 | 11 | 20 | 22 | 600 | 8.0 | 2.0 | +0.076 |
| 1N5242 | 12 | 20 | 30 | 600 | 8.7 | 1.0 | +0.077 |
| 1N5243 | 13 | 9.5 | 13 | 600 | 9.4 | 0.5 | +0.079 |
| 1N5244 | 14 | 9.0 | 15 | 600 | 9.5 | 0.1 | +0.082 |
| 1N5245 | 15 | 8.5 | 16 | 600 | 10.5 | 0.1 | +0.082 |
| 1N5246 | 16 | 7.8 | 17 | 600 | 11.4 | 0.1 | +0.083 |
| 1N5247 | 17 | 7.4 | 19 | 600 | 12.4 | 0.1 | +0.084 |
| 1N5248 | 18 | 7.0 | 21 | 600 | 13.3 | 0.1 | +0.085 |
| 1N5249 | 19 | 6.6 | 23 | 600 | 13.3 | 0.1 | +0.086 |
| 1N5250 | 20 | 6.2 | 25 | 600 | 14.3 | 0.1 | +0.086 |
| 1N5251 | 22 | 5.6 | 29 | 600 | 16.2 | 0.1 | +0.087 |
| 1N5252 | 24 | 5.2 | 33 | 600 | 17.1 | 0.1 | +0.088 |
| 1N5253 | 25 | 5.0 | 35 | 600 | 18.1 | 0.1 | +0.089 |
| 1N5254 | 27 | 4.6 | 41 | 600 | 20 | 0.1 | +0.090 |
| 1N5255 | 28 | 4.5 | 44 | 600 | 20 | 0.1 | +0.091 |
| 1N5256 | 30 | 4.2 | 49 | 600 | 22 | 0.1 | +0.091 |
| 1N5257 | 33 | 3.8 | 58 | 700 | 24 | 0.1 | +0.092 |
| 1N5258 | 36 | 3.4 | 70 | 700 | 26 | 0.1 | +0.093 |
| 1N5259 | 39 | 3.2 | 80 | 800 | 29 | 0.1 | +0.094 |
| 1N5260 | 43 | 3.0 | 93 | 900 | 31 | 0.1 | +0.095 |
| 1N5261 | 47 | 2.7 | 105 | 1000 | 34 | 0.1 | +0.095 |
| 1N5262 | 51 | 2.5 | 125 | 1100 | 37 | 0.1 | +0.096 |
| 1N5263 | 56 | 2.2 | 150 | 1300 | 43 | 0.1 | +0.096 |
| 1N5264 | 60 | 2.1 | 170 | 1400 | 46 | 0.1 | +0.097 |