



Micro Commercial Components
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ZPY1 THRU ZPY200

Silicon 1.3 Watt Zener Diodes

Features

- For surface mount application
- Silicon Power Zener Diodes
- 1.0 thru 200 Volt Voltage Range
- Standard Tolerance of Zener Voltage $\pm 5\%$

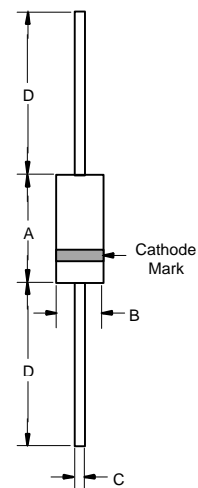
Mechanical Data

- Plastic Case: DO-41
- Weight Approx: 0.4 g

Maximum Ratings @ 25°C Unless Otherwise Specified

| | | | |
|---|------------------------|----------------------------|-------------|
| Power Dissipation | P_{tot} | 1.3 | Watt |
| Thermal Resistance Junction to Ambient Air | R_{thA} | <45 | K/W |
| Thermal Resistance Junction to Terminal | R_{thT} | <15 | K/W |
| Operation Temperature | T_J | -50°C to +150°C | |
| Storage Temperature | T_{STG} | -50°C to +175°C | |

DO-41



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|-------|-------|----------|
| | MIN | MAX | MIN | MAX | |
| A | 0.160 | 0.205 | 4.10 | 5.20 | |
| B | 0.080 | 0.107 | 2.00 | 2.70 | Diameter |
| C | 0.028 | 0.034 | 0.71 | 0.86 | Diameter |
| D | 1.000 | ----- | 25.40 | ----- | |

Maximum ratings

Grenzwerte

| Type Typ | Zener voltage ²⁾ Zener-Spanng. ²⁾ $I_Z = I_{Ztest}$ V_{Zmin} [V] V_{Zmax} | | Test current Meßstrom I_{Ztest} [mA] | Dyn. resistance Diff. Widerst. $I_{Ztest} / 1 \text{ kHz}$ r_{zj} [Ω] | Temp. Coeffiz. of Z-voltage ...der Z-spanng. α_{vZ} [$10^{-4}/^\circ\text{C}$] | Reverse volt. Sperrspanng. $I_R = 1 \mu\text{A}$ V_R [V] | Z-current ¹⁾ Z-Strom ¹⁾ $T_A = 50^\circ\text{C}$ I_{Zmax} [mA] |
|---------------------|--|------|---|---|--|---|---|
| ZPY 1 ³⁾ | 0.71 | 0.82 | 100 | 0.5 (<1) | -26...-16 | - | 1000 |
| ZPY 3.9 | 3.7 | 4.1 | 100 | 4 (<6) | -7...+2 | - | 317 |
| ZPY 4.3 | 4.0 | 4.6 | 100 | 3.8 (<6) | -7...+3 | - | 283 |
| ZPY 4.7 | 4.4 | 5.0 | 100 | 3 (<5) | -7...+4 | - | 260 |
| ZPY 5.1 | 4.8 | 5.4 | 100 | 2 (<3) | -6...+5 | - | 241 |
| ZPY 5.6 | 5.2 | 6.0 | 100 | 1 (<2) | -3...+5 | > 1.5 | 217 |
| ZPY 6.2 | 5.8 | 6.6 | 100 | 1 (<2) | -1...+6 | > 1.5 | 197 |
| ZPY 6.8 | 6.4 | 7.2 | 100 | 1 (<2) | 0...+7 | > 2 | 181 |
| ZPY 7.5 | 7.0 | 7.9 | 100 | 1 (<2) | 0...+7 | > 2 | 165 |
| ZPY 8.2 | 7.7 | 8.7 | 100 | 1 (<2) | +3...+8 | > 3.5 | 149 |
| ZPY 9.1 | 8.5 | 9.6 | 50 | 2 (<4) | +3...+8 | > 3.5 | 135 |
| ZPY 10 | 9.4 | 10.6 | 50 | 2 (<4) | +5...+9 | > 5 | 123 |
| ZPY 11 | 10.4 | 11.6 | 50 | 4 (<7) | +5...+10 | > 5 | 112 |
| ZPY 12 | 11.4 | 12.7 | 50 | 4 (<7) | +5...+10 | > 7 | 102 |
| ZPY 13 | 12.4 | 14.1 | 50 | 5 (<10) | +5...+10 | > 7 | 92 |
| ZPY 15 | 13.8 | 15.6 | 50 | 5 (<10) | +5...+10 | > 10 | 83 |
| ZPY 16 | 15.3 | 17.1 | 25 | 6 (<15) | +6...+11 | > 10 | 76 |
| ZPY 18 | 16.8 | 19.1 | 25 | 6 (<15) | +6...+11 | > 10 | 68 |
| ZPY 20 | 18.8 | 21.2 | 25 | 6 (<15) | +6...+11 | > 10 | 61 |
| ZPY 22 | 20.8 | 23.3 | 25 | 6 (<15) | +6...+11 | > 12 | 56 |
| ZPY 24 | 22.8 | 25.6 | 25 | 7 (<15) | +6...+11 | > 12 | 51 |
| ZPY 27 | 25.1 | 28.9 | 25 | 7 (<15) | +6...+11 | > 14 | 45 |
| ZPY 30 | 28 | 32 | 25 | 8 (<15) | +6...+11 | > 14 | 41 |
| ZPY 33 | 31 | 35 | 25 | 8 (<15) | +6...+11 | > 17 | 37 |
| ZPY 36 | 34 | 38 | 10 | 16 (<30) | +6...+11 | > 17 | 34 |
| ZPY 39 | 37 | 41 | 10 | 20 (<40) | +6...+11 | > 20 | 32 |
| ZPY 43 | 40 | 46 | 10 | 24 (<40) | +7...+12 | > 20 | 28 |
| ZPY 47 | 44 | 50 | 10 | 24 (<40) | +7...+12 | > 24 | 26 |
| ZPY 51 | 48 | 54 | 10 | 25 (<60) | +7...+12 | > 24 | 24 |
| ZPY 56 | 52 | 60 | 10 | 25 (<60) | +7...+12 | > 28 | 22 |
| ZPY 62 | 58 | 66 | 10 | 25 (<80) | +8...+13 | > 28 | 20 |
| ZPY 68 | 64 | 72 | 10 | 25 (<80) | +8...+13 | > 34 | 18 |
| ZPY 75 | 70 | 79 | 10 | 30 (<100) | +8...+13 | > 34 | 16 |
| ZPY 82 | 77 | 88 | 10 | 30 (<100) | +8...+13 | > 41 | 15 |
| ZPY 91 | 85 | 96 | 5 | 40 (<150) | +9...+13 | > 41 | 14 |
| ZPY 100 | 94 | 106 | 5 | 60 (<150) | +9...+13 | > 50 | 12 |
| ZPY 110 | 104 | 116 | 5 | 80 (<200) | +9...+13 | > 50 | 11 |
| ZPY 120 | 114 | 127 | 5 | 80 (<200) | +9...+13 | > 60 | 10 |
| ZPY 130 | 124 | 141 | 5 | 90 (<250) | +9...+13 | > 60 | 9 |
| ZPY 150 | 138 | 156 | 5 | 100 (<250) | +9...+13 | > 75 | 8 |
| ZPY 160 | 153 | 171 | 5 | 110 (<300) | +9...+13 | > 75 | 8 |
| ZPY 180 | 168 | 191 | 5 | 120 (<350) | +9...+13 | > 90 | 7 |
| ZPY 200 | 188 | 212 | 5 | 150 (<350) | +9...+13 | > 90 | 6 |