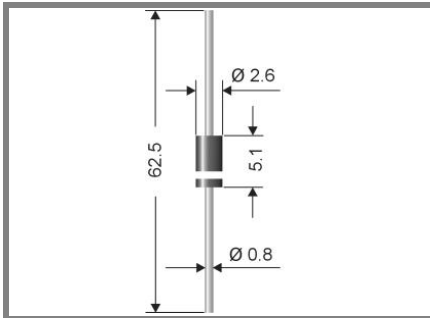


ZY 1 ... ZY 200 (2W)



Axial lead diode

Zener silicon diodes

ZY 1...ZY 200(2W)

Maximum Power Dissipation: 2 W

Nominal Z-voltage: 1 to 200 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- Standard Zener voltage tolerance is graded to the international E 24 (5%) standard. Other voltage tolerances and higher Zener voltages on request.

Mechanical Data

- Plastic case DO-41/DO-204AL
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 5000 pieces per ammo

- 1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
- 2) Tested with pulses
- 3) The ZY1 is a diode, operated in forward. The cathode, indicated by a ring, is to be connected to the negative pole.

| Absolute Maximum Ratings | | $T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified | |
|--------------------------|---|---|------------------|
| Symbol | Conditions | Values | Units |
| P_{tot} | Power dissipation, $T_A = 50\text{ }^\circ\text{C}$ ¹⁾ | 2 | W |
| P_{ZSM} | Non repetitive peak power dissipation, $t < 10\text{ ms}$ | 60 | W |
| R_{thA} | Max. thermal resistance junction to ambient | 45 | K/W |
| R_{thT} | Max. thermal resistance junction to terminal | 15 | K/W |
| T_j | Operating junction temperature | - 50 ... + 150 | $^\circ\text{C}$ |
| T_s | Storage temperature | - 50 ... + 175 | $^\circ\text{C}$ |

| Type | Zener Voltage ²⁾ $V_Z@I_{ZT}$ | | Test curr. I_{ZT} mA | Dyn. Resistance $Z_{ZT}@I_{ZT}$ Ω | Temp. Coeffiz. of V_Z a_{VZ} $10^{-4}/^\circ\text{C}$ | | | Z-curr. ¹⁾ $T_A = 50\text{ }^\circ\text{C}$ $I_{Z\text{max}}$ mA |
|--------------------|---|------------------------|------------------------------|--|---|------------------------|------------|--|
| | $V_{Z\text{min}}$ V | $V_{Z\text{max}}$ V | | | | I_R μA | V_R V | |
| ZY 1 ³⁾ | 0,71 | 0,82 | 100 | 0,5 (<1) | - 26 ... - 16 | 1 | - | 1500 |
| ZY 10 | 9,4 | 10,6 | 50 | 2 (<4) | + 5 ... + 9 | 1 | > 5 | 170 |
| ZY 11 | 10,4 | 11,6 | 50 | 3 (<6) | + 5 ... + 10 | 1 | > 5 | 155 |
| ZY 12 | 11,4 | 12,7 | 50 | 4 (<7) | + 5 ... + 10 | 1 | > 7 | 142 |
| ZY 13 | 12,4 | 14,1 | 50 | 5 (<9) | + 5 ... + 10 | 1 | > 7 | 128 |
| ZY 15 | 13,8 | 15,6 | 50 | 5 (<10) | + 5 ... + 10 | 1 | > 10 | 115 |
| ZY 16 | 15,3 | 17,1 | 25 | 6 (<12) | + 6 ... + 11 | 1 | > 10 | 105 |
| ZY 18 | 16,8 | 19,1 | 25 | 6 (<15) | + 6 ... + 11 | 1 | > 10 | 94 |
| ZY 20 | 18,8 | 21,2 | 25 | 6 (<15) | + 6 ... + 11 | 1 | > 10 | 85 |
| ZY 22 | 20,8 | 23,3 | 25 | 6 (<15) | + 6 ... + 11 | 1 | > 12 | 77 |
| ZY 24 | 22,8 | 25,6 | 25 | 7 (<15) | + 6 ... + 11 | 1 | > 12 | 70 |
| ZY 27 | 25,1 | 28,9 | 25 | 7 (<15) | + 6 ... + 11 | 1 | > 14 | 62 |
| ZY 30 | 28 | 32 | 25 | 8 (<15) | + 6 ... + 11 | 1 | > 14 | 56 |
| ZY 33 | 31 | 35 | 25 | 8 (<15) | + 6 ... + 11 | 1 | > 17 | 51 |
| ZY 36 | 34 | 38 | 10 | 16 (<40) | + 6 ... + 11 | 1 | > 17 | 47 |
| ZY 39 | 37 | 41 | 10 | 20 (<40) | + 6 ... + 11 | 1 | > 20 | 44 |
| ZY 43 | 40 | 46 | 10 | 24 (<45) | + 7 ... + 12 | 1 | > 20 | 39 |
| ZY 47 | 44 | 50 | 10 | 24 (<45) | + 7 ... + 12 | 1 | > 24 | 36 |
| ZY 51 | 48 | 54 | 10 | 25 (<60) | + 7 ... + 12 | 1 | > 24 | 33 |
| ZY 56 | 52 | 60 | 10 | 25 (<60) | + 7 ... + 12 | 1 | > 28 | 30 |
| ZY 62 | 58 | 66 | 10 | 25 (<80) | + 8 ... + 13 | 1 | > 28 | 27 |
| ZY 68 | 64 | 72 | 10 | 25 (<80) | + 8 ... + 13 | 1 | > 34 | 25 |
| ZY 75 | 70 | 79 | 10 | 30 (<100) | + 8 ... + 13 | 1 | > 34 | 23 |
| ZY 82 | 77 | 88 | 10 | 30 (<100) | + 8 ... + 13 | 1 | > 41 | 20 |
| ZY 91 | 85 | 96 | 5 | 40 (<200) | + 9 ... + 13 | 1 | > 41 | 19 |
| ZY 100 | 94 | 106 | 5 | 60 (<200) | + 9 ... + 13 | 1 | > 50 | 17 |
| ZY 110 | 104 | 116 | 5 | 80 (<250) | + 9 ... + 13 | 1 | > 50 | 16 |
| ZY 120 | 114 | 127 | 5 | 80 (<250) | + 9 ... + 13 | 1 | > 60 | 14 |
| ZY 130 | 124 | 141 | 5 | 90 (<300) | + 9 ... + 13 | 1 | > 60 | 13 |
| ZY 150 | 138 | 156 | 5 | 100(<300) | + 9 ... + 13 | 1 | > 75 | 12 |
| ZY 160 | 153 | 171 | 5 | 110(<350) | + 9 ... + 13 | 1 | > 75 | 11 |
| ZY 180 | 168 | 191 | 5 | 120(<350) | + 9 ... + 13 | 1 | > 90 | 9 |
| ZY 200 | 188 | 212 | 5 | 150(<350) | + 9 ... + 13 | 1 | > 90 | 8 |