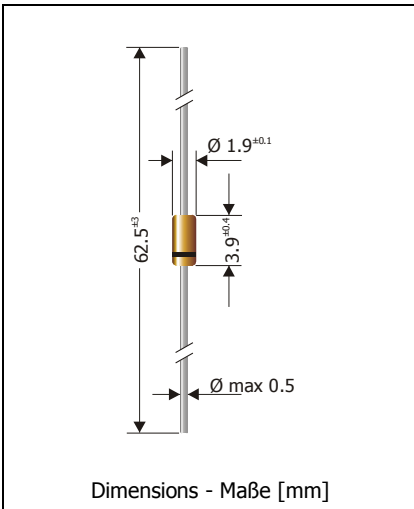


HZ2A1 ... HZ36-3 (500 mW)
Silicon Planar Zener Diodes
Silizium-Planar-Zener-Dioden

Version 2012-11-19



| | |
|---|-----------------------|
| Maximum power dissipation Maximale Verlustleistung | 500 mW |
| Nominal Z-voltage Nominale Z-Spannung | 1.6...38 V |
| Glass case Glasgehäuse | ~ DO-35 ~ (SOD-27) |
| Weight approx. Gewicht ca. | 0.13 g |

Standard packaging taped in ammo pack
 Standard Lieferform gegurtet in Ammo-Pack



All of these special type zener diodes are available only on request.

Alle Typen dieser speziellen Zenerdioden sind nur auf Anfrage erhältlich.

Maximum ratings and Characteristics

Grenz- und Kennwerte

| | | ZPD-series | |
|--|--------------------------|-------------------|------------------------------|
| Power dissipation Verlustleistung | $T_A = 25^\circ\text{C}$ | P_{tot} | 500 mW ¹⁾ |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+175°C -50...+175°C |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | R_{thA} | < 300 K/W ¹⁾ |
| Thermal resistance junction to lead Wärmewiderstand Sperrschicht – Anschlussdraht | | R_{thL} | < 240 K/W |

Zener voltages see table on next page – Zener-Spannungen siehe Tabelle auf der nächsten Seite

1 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
 Gültig, wenn die Anschlussdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden
 2 Tested with pulses – Gemessen mit Impulsen

Maximum ratings

| Type Typ | Zener voltage Zener-Spannung $I_z = 5 \text{ mA}$ | | Dynamic resistance Differenzieller Widerstand $r_{zj} [\Omega]$ at $f = 1 \text{ kHz}$ | Reverse voltage Sperrspannung $I_R = 1 \mu\text{A}$ |
|-------------|---|-----------------------|--|---|
| | $V_{zmin} [\text{V}]$ | $V_{zmax} [\text{V}]$ | $I_z = 5 \text{ mA}$ | $V_R [\text{V}]$ |
| HZ2A1 | 1.6 | 1.8 | <100 | >0.5 (25 μA) |
| HZ2A2 | 1.7 | 1.9 | | |
| HZ2A3 | 1.8 | 2.0 | | |
| HZ2B1 | 1.9 | 2.1 | <100 | >0.5 (5 μA) |
| HZ2B2 | 2.0 | 2.2 | | |
| HZ2B3 | 2.1 | 2.3 | | |
| HZ2C1 | 2.2 | 2.4 | | |
| HZ2C2 | 2.3 | 2.5 | | |
| HZ2C3 | 2.4 | 2.6 | | |
| HZ3A1 | 2.5 | 2.7 | | |
| HZ3A2 | 2.6 | 2.8 | | |
| HZ3A3 | 2.7 | 2.9 | | |
| HZ3B1 | 2.8 | 3.0 | | |
| HZ3B2 | 2.9 | 3.1 | | |
| HZ3B3 | 3.0 | 3.2 | | |
| HZ3C1 | 3.1 | 3.3 | | |
| HZ3C2 | 3.2 | 3.4 | | |
| HZ3C3 | 3.3 | 3.5 | | |
| HZ4A1 | 3.4 | 3.6 | <100 | >1 (5 μA) |
| HZ4A2 | 3.5 | 3.7 | | |
| HZ4A3 | 3.6 | 3.8 | | |
| HZ4B1 | 3.7 | 3.9 | | |
| HZ4B2 | 3.8 | 4.0 | | |
| HZ4B3 | 3.9 | 4.1 | | |
| HZ4C1 | 4.0 | 4.2 | | |
| HZ4C2 | 4.1 | 4.3 | | |
| HZ4C3 | 4.2 | 4.4 | | |
| HZ5A1 | 4.3 | 4.5 | <100 | >1.5 (5 μA) |
| HZ5A2 | 4.4 | 4.6 | | |
| HZ5A3 | 4.5 | 4.7 | | |
| HZ5B1 | 4.6 | 4.8 | | |
| HZ5B2 | 4.7 | 4.9 | | |
| HZ5B3 | 4.8 | 5.0 | | |
| HZ5C1 | 4.9 | 5.1 | | |
| HZ5C2 | 5.0 | 5.2 | | |
| HZ5C3 | 5.1 | 5.3 | | |
| HZ6A1 | 5.2 | 5.5 | <40 | >2 (5 μA) |
| HZ6A2 | 5.3 | 5.6 | | |
| HZ6A3 | 5.4 | 5.7 | | |
| HZ6B1 | 5.5 | 5.8 | | |
| HZ6B2 | 5.6 | 5.9 | | |

Maximum ratings

| Type Typ | Zener voltage Zener-Spannung $I_z = 5 \text{ mA}$ | | Dynamic resistance Diff. Widerstand $r_{zj} [\Omega]$ at $f = 1 \text{ kHz}$ | Reverse volt. Sperrspanng. $I_R = 1 \mu\text{A}$ |
|-------------|---|-----------------------|--|--|
| | $V_{zmin} [\text{V}]$ | $V_{zmax} [\text{V}]$ | $I_z = 5 \text{ mA}$ | $V_R [\text{V}]$ |
| HZ6B3 | 5.7 | 6.0 | <40 | >2 (5 μA) |
| HZ6C1 | 5.8 | 6.1 | | |
| HZ6C2 | 6.0 | 6.3 | | |
| HZ6C3 | 6.1 | 6.4 | | |
| HZ7A1 | 6.3 | 6.6 | <15 | >3.5 |
| HZ7A2 | 6.4 | 6.7 | | |
| HZ7A3 | 6.6 | 6.9 | | |
| HZ7B1 | 6.7 | 7.0 | | |
| HZ7B2 | 6.9 | 7.2 | | |
| HZ7B3 | 7.0 | 7.3 | | |
| HZ7C1 | 7.2 | 7.6 | | |
| HZ7C2 | 7.3 | 7.7 | | |
| HZ7C3 | 7.5 | 7.9 | | |
| HZ9A1 | 7.7 | 8.1 | | |
| HZ9A2 | 7.9 | 8.3 | | |
| HZ9A3 | 8.1 | 8.5 | | |
| HZ9B1 | 8.3 | 8.7 | | |
| HZ9B2 | 8.5 | 8.9 | | |
| HZ9B3 | 8.7 | 9.1 | | |
| HZ9C1 | 8.9 | 9.3 | | |
| HZ9C2 | 9.1 | 9.5 | | |
| HZ9C3 | 9.3 | 9.7 | | |
| HZ11A1 | 9.5 | 9.9 | <25 | >7.5 |
| HZ11A2 | 9.7 | 10.1 | | |
| HZ11A3 | 9.9 | 10.3 | | |
| HZ11B1 | 10.2 | 10.6 | | |
| HZ11B2 | 10.4 | 10.8 | | |
| HZ11B3 | 10.7 | 11.1 | | |
| HZ11C1 | 10.9 | 11.3 | | |
| HZ11C2 | 11.1 | 11.6 | | |
| HZ11C3 | 11.4 | 11.9 | | |
| HZ12A1 | 11.6 | 12.1 | <35 | >9.5 |
| HZ12A2 | 11.9 | 12.4 | | |
| HZ12A3 | 12.2 | 12.7 | | |
| HZ12B1 | 12.4 | 12.9 | | |
| HZ12B2 | 12.6 | 13.1 | | |
| HZ12B3 | 12.9 | 13.4 | | |
| HZ12C1 | 13.2 | 13.7 | | |
| HZ12C2 | 13.5 | 14.0 | | |
| HZ12C3 | 13.8 | 14.3 | | |
| HZ15-1 | 14.1 | 14.7 | | |

Maximum ratings

| Type Typ | Zener voltage Zener-Spannung $I_z = 5 \text{ mA}$ | | Dynamic resistance Diff. Widerstand $r_{zj} [\Omega]$ at $f = 1 \text{ kHz}$ | Reverse volt. Sperrspanng. $I_R = 1 \mu\text{A}$ |
|-------------|---|-----------------------|--|--|
| | $V_{zmin} [\text{V}]$ | $V_{zmax} [\text{V}]$ | $I_z = 5 \text{ mA}$ | $V_R [\text{V}]$ |
| HZ15-2 | 14.5 | 15.1 | <40 | >11 |
| HZ15-3 | 14.9 | 15.5 | | |
| HZ16-1 | 15.3 | 15.9 | <45 | >12 |
| HZ16-2 | 15.7 | 16.5 | | |
| HZ16-3 | 16.3 | 17.1 | | |
| HZ18-1 | 16.9 | 17.7 | <55 | >13 |
| HZ18-2 | 17.5 | 18.3 | | |
| HZ18-3 | 18.1 | 19.0 | | |
| HZ20-1 | 18.8 | 19.7 | <60 | >15 |
| HZ20-2 | 19.5 | 20.4 | | |
| HZ20-3 | 20.2 | 21.1 | | |
| HZ22-1 | 20.9 | 21.9 | <65 | >17 |
| HZ22-2 | 21.6 | 22.6 | | |
| HZ22-3 | 22.3 | 23.3 | | |
| HZ24-1 | 22.9 | 24.0 | <70 | >19 |
| HZ24-2 | 23.6 | 24.7 | | |
| HZ24-3 | 24.3 | 25.5 | | |
| HZ27-1 | 25.2 | 26.6 | <80 | >21 |
| HZ27-2 | 26.2 | 27.6 | | |
| HZ27-3 | 27.2 | 28.6 | | |
| HZ30-1 | 28.2 | 29.6 | <100 | >23 |
| HZ30-2 | 29.2 | 30.6 | | |
| HZ30-3 | 30.2 | 31.6 | | |
| HZ33-1 | 31.2 | 32.6 | <120 | >25 |
| HZ33-2 | 32.2 | 33.6 | | |
| HZ33-3 | 33.2 | 34.6 | | |
| HZ36-1 | 34.2 | 35.7 | <140 | >27 |
| HZ36-2 | 35.2 | 36.8 | | |
| HZ36-3 | 36.4 | 38.0 | | |