

HZ Series

V_Z : 2.0 - 36V

P_D : 500mW

FEATURES :

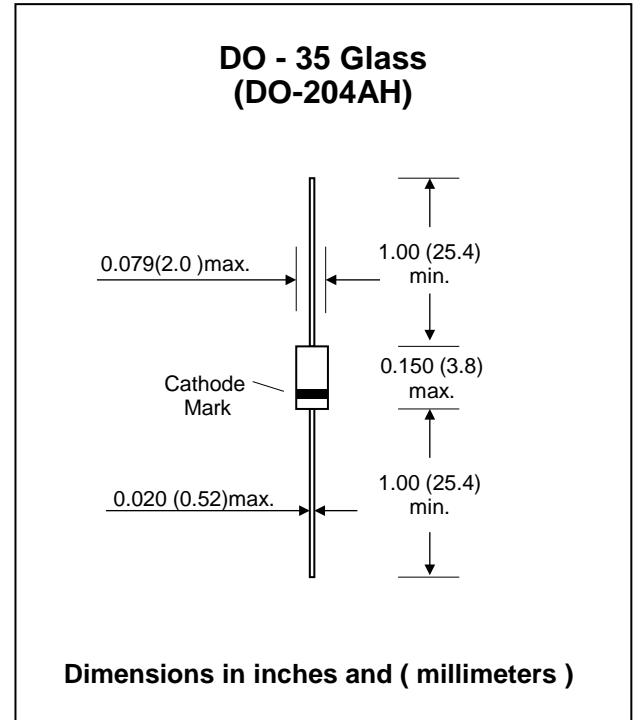
- * Low leakage, low zener impedance
- * Maximum power dissipation of 500 mW
- * Ideally suited for stabilized power supply, etc.
- * **Pb / RoHS Free**

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

ZENER DIODES



Maximum Ratings and Thermal Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

| Parameter | Symbol | Value | Unit |
|---|--------|--------------|------|
| Zener Current see Table "Characteristics" | | | |
| Power Dissipation at $T_a = 75\text{ °C}$ | P_D | 500 | mW |
| Junction temperature | T_J | 175 | °C |
| Storage temperature range | T_S | -65 to + 175 | °C |



Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified

| Type No. | Grade | Zener Voltage $V_Z @ I_{ZT}$ | | | | | | Test Current | Maximum Dynamic Resistance | | Maximum Reverse Current | |
|----------|-------|---------------------------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------------------------|-------------|-------------------------------|------------|
| | | Suffix-1 | | Suffix-2 | | Suffix-3 | | | $r_d @ I_Z$ | $I_R @ V_R$ | | |
| | | min. (V) | max. (V) | min. (V) | max. (V) | min. (V) | max. (V) | (Ω) | | | (mA) | (μ A) |
| HZ2 | A | 1.6 | 1.8 | 1.7 | 1.9 | 1.8 | 2.0 | 5 | 100 | 5 | 25 | 0.5 |
| | B | 1.9 | 2.1 | 2.0 | 2.2 | 2.1 | 2.3 | 5 | 100 | 5 | 5 | 0.5 |
| | C | 2.2 | 2.4 | 2.3 | 2.5 | 2.4 | 2.6 | 5 | 100 | 5 | 5 | 0.5 |
| HZ3 | A | 2.5 | 2.7 | 2.6 | 2.8 | 2.7 | 2.9 | 5 | 100 | 5 | 5 | 0.5 |
| | B | 2.8 | 3.0 | 2.9 | 3.1 | 3.0 | 3.2 | 5 | 100 | 5 | 5 | 0.5 |
| | C | 3.1 | 3.3 | 3.2 | 3.4 | 3.3 | 3.5 | 5 | 100 | 5 | 5 | 0.5 |
| HZ4 | A | 3.4 | 3.6 | 3.5 | 3.7 | 3.6 | 3.8 | 5 | 100 | 5 | 5 | 1.0 |
| | B | 3.7 | 3.9 | 3.8 | 4.0 | 3.9 | 4.1 | 5 | 100 | 5 | 5 | 1.0 |
| | C | 4.0 | 4.2 | 4.1 | 4.3 | 4.2 | 4.4 | 5 | 100 | 5 | 5 | 1.0 |
| HZ5 | A | 4.3 | 4.5 | 4.4 | 4.6 | 4.5 | 4.7 | 5 | 100 | 5 | 5 | 1.5 |
| | B | 4.6 | 4.8 | 4.7 | 4.9 | 4.8 | 5.0 | 5 | 100 | 5 | 5 | 1.5 |
| | C | 4.9 | 5.1 | 5.0 | 5.2 | 5.1 | 5.3 | 5 | 100 | 5 | 5 | 1.5 |
| HZ6 | A | 5.2 | 5.5 | 5.3 | 5.6 | 5.4 | 5.7 | 5 | 40 | 5 | 5 | 2.0 |
| | B | 5.5 | 5.8 | 5.6 | 5.9 | 5.7 | 6.0 | 5 | 40 | 5 | 5 | 2.0 |
| | C | 5.8 | 6.1 | 6.0 | 6.3 | 6.1 | 6.4 | 5 | 40 | 5 | 5 | 2.0 |
| HZ7 | A | 6.3 | 6.6 | 6.4 | 6.7 | 6.6 | 6.9 | 5 | 15 | 5 | 1 | 3.5 |
| | B | 6.7 | 7.0 | 6.9 | 7.2 | 7.0 | 7.3 | 5 | 15 | 5 | 1 | 3.5 |
| | C | 7.2 | 7.6 | 7.3 | 7.7 | 7.5 | 7.9 | 5 | 15 | 5 | 1 | 3.5 |
| HZ9 | A | 7.7 | 8.1 | 7.9 | 8.3 | 8.1 | 8.5 | 5 | 20 | 5 | 1 | 5.0 |
| | B | 8.3 | 8.7 | 8.5 | 8.9 | 8.7 | 9.1 | 5 | 20 | 5 | 1 | 5.0 |
| | C | 8.9 | 9.3 | 9.1 | 9.5 | 9.3 | 9.7 | 5 | 20 | 5 | 1 | 5.0 |
| HZ11 | A | 9.5 | 9.9 | 9.7 | 10.1 | 9.9 | 10.3 | 5 | 25 | 5 | 1 | 7.5 |
| | B | 10.2 | 10.6 | 10.4 | 10.8 | 10.7 | 11.1 | 5 | 25 | 5 | 1 | 7.5 |
| | C | 10.9 | 11.3 | 11.1 | 11.6 | 11.4 | 11.9 | 5 | 25 | 5 | 1 | 7.5 |
| HZ12 | A | 11.6 | 12.1 | 11.9 | 12.4 | 12.2 | 12.7 | 5 | 35 | 5 | 1 | 9.5 |
| | B | 12.4 | 12.9 | 12.6 | 13.1 | 12.9 | 13.4 | 5 | 35 | 5 | 1 | 9.5 |
| | C | 13.2 | 13.7 | 13.5 | 14.0 | 13.8 | 14.3 | 5 | 35 | 5 | 1 | 9.5 |
| HZ15 | | 14.1 | 14.7 | 14.5 | 15.1 | 14.9 | 15.5 | 5 | 40 | 5 | 1 | 11 |
| HZ16 | | 15.3 | 15.9 | 15.7 | 16.5 | 16.3 | 17.1 | 5 | 45 | 5 | 1 | 12 |
| HZ18 | | 16.9 | 17.7 | 17.5 | 18.3 | 18.1 | 19.0 | 5 | 55 | 5 | 1 | 13 |
| HZ20 | | 18.8 | 19.7 | 19.5 | 20.4 | 20.2 | 21.1 | 2 | 60 | 2 | 1 | 15 |
| HZ22 | | 20.9 | 21.9 | 21.6 | 22.6 | 22.3 | 23.3 | 2 | 65 | 2 | 1 | 17 |
| HZ24 | | 22.9 | 24.0 | 23.6 | 24.7 | 24.3 | 25.5 | 2 | 70 | 2 | 1 | 19 |
| HZ27 | | 25.2 | 26.6 | 26.2 | 27.6 | 27.2 | 28.6 | 2 | 80 | 2 | 1 | 21 |
| HZ30 | | 28.2 | 29.6 | 29.2 | 30.6 | 30.2 | 31.6 | 2 | 100 | 2 | 1 | 23 |
| HZ33 | | 31.2 | 32.6 | 32.2 | 33.6 | 33.2 | 34.6 | 2 | 120 | 2 | 1 | 25 |
| HZ36 | | 34.2 | 35.7 | 35.3 | 36.8 | 36.4 | 38.0 | 2 | 140 | 2 | 1 | 27 |

Note :

Type No. is as follows; HZ2B1, HZ2B2, HZ36-3.

RATING AND CHARACTERISTIC CURVES (HZ Series)

FIG.1 - POWER DISSIPATION vs. ZENER VOLTAGE

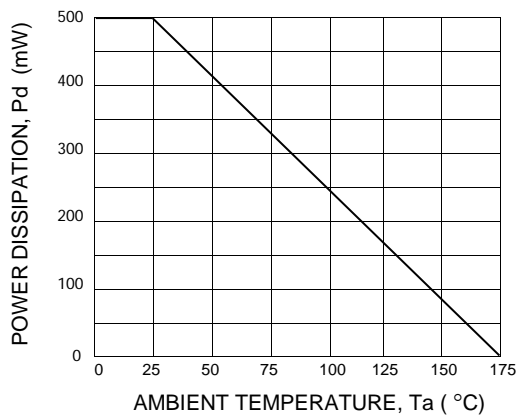


FIG.2 - TEMPERATURE COEFFICIENT vs. ZENER VOLTAGE

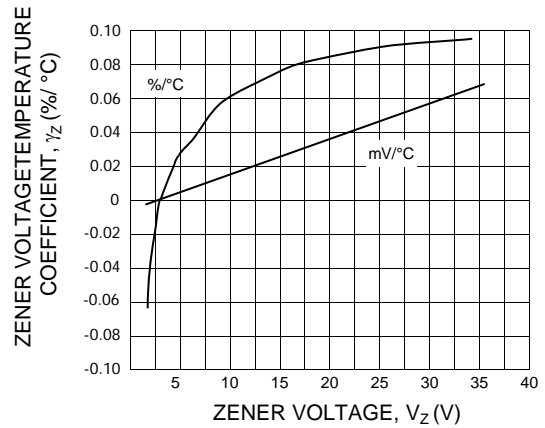


FIG.3 - ZENER CURRENT vs. ZENER VOLTAGE

