



V_Z : 2.0 - 100 Volts

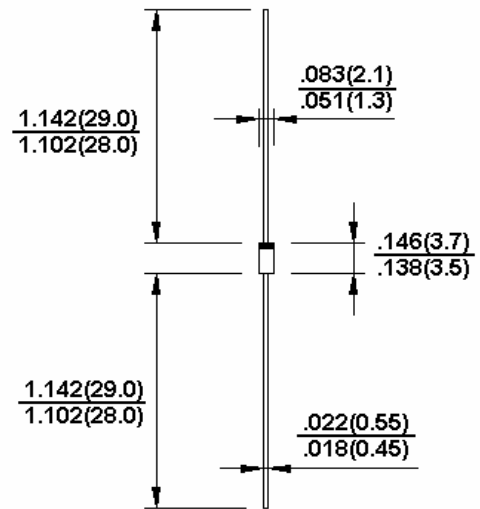
P_D : 500 mWatts

DO-35(GLASS)



Features

- ✧ Zener Voltage range 2.0 to 100 volts
- ✧ DO-35 package (JEDEC)
- ✧ Through-hole device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surfaces are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Solder hot dip Tin(Sn) lead finish
- ✧ Cathode indicated by polarity band



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

| Type Number | Symbol | Value | Units |
|--|------------------|--------------|-------|
| Power Dissipation | P _d | 500 | mW |
| Maximum Forward Voltage @ I _F = 100mA | V _F | 1.0 | V |
| Storage Temperature Range | T _{STG} | -65 to + 200 | °C |
| Operating Junction Temperature | T _J | + 200 | °C |

These ratings are limiting values above which the serviceability of the diode may be impaired.



ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| PART NUMBER | ZENER VOLTAGE RANGE ⁽¹⁾ at I _{ZT} | | TEST CURRENT | MAXIMUM DYNAMIC RESISTANCE | | TEST CURRENT | EFFECTIVE TEMP. COEFFICIENT | | REVERSE CURRENT | REVERSE VOLTAGE |
|-------------|---|------|-----------------|----------------------------|------------------|-----------------|-----------------------------|-------|-----------------|-----------------|
| | V _Z (V) | | I _{ZT} | @I _{ZT} | @I _{ZK} | I _{ZK} | %/ ^o C | | I _R | V _R |
| | Min | Max | mA | OHMS | OHMS | mA | Min | Max | nA | V |
| BZX55B2V0 | 1.96 | 2.04 | 5 | 100 | 600 | 1 | -0.09 | -0.06 | 150000 | 1 |
| BZX55B2V2 | 2.16 | 2.24 | 5 | 100 | 600 | 1 | -0.09 | -0.06 | 150000 | 1 |
| BZX55B2V4 | 2.35 | 2.45 | 5 | 85 | 600 | 1 | -0.09 | -0.06 | 50000 | 1 |
| BZX55B2V7 | 2.6 | 2.8 | 5 | 85 | 600 | 1 | -0.09 | -0.06 | 10000 | 1 |
| BZX55B3V0 | 2.9 | 3.1 | 5 | 85 | 600 | 1 | -0.08 | -0.05 | 4000 | 1 |
| BZX55B3V3 | 3.2 | 3.4 | 5 | 85 | 600 | 1 | -0.08 | -0.05 | 2000 | 1 |
| BZX55B3V6 | 3.5 | 3.7 | 5 | 85 | 600 | 1 | -0.08 | -0.05 | 2000 | 1 |
| BZX55B3V9 | 3.8 | 4.0 | 5 | 85 | 600 | 1 | -0.08 | -0.05 | 2000 | 1 |
| BZX55B4V3 | 4.2 | 4.4 | 5 | 75 | 600 | 1 | -0.06 | -0.03 | 1000 | 1 |
| BZX55B4V7 | 4.6 | 4.8 | 5 | 60 | 600 | 1 | -0.05 | 0.02 | 500 | 1 |
| BZX55B5V1 | 5.0 | 5.2 | 5 | 35 | 550 | 1 | -0.02 | 0.02 | 100 | 1 |
| BZX55B5V6 | 5.5 | 5.7 | 5 | 25 | 450 | 1 | -0.05 | 0.05 | 100 | 1 |
| BZX55B6V2 | 6.1 | 6.3 | 5 | 10 | 200 | 1 | 0.03 | 0.06 | 100 | 2 |
| BZX55B6V8 | 6.7 | 6.9 | 5 | 8 | 150 | 1 | 0.03 | 0.07 | 100 | 3 |
| BZX55B7V5 | 7.4 | 7.6 | 5 | 7 | 50 | 1 | 0.03 | 0.07 | 100 | 5 |
| BZX55B8V2 | 8.1 | 8.4 | 5 | 7 | 50 | 1 | 0.03 | 0.08 | 100 | 6.2 |
| BZX55B9V1 | 8.9 | 9.3 | 5 | 10 | 50 | 1 | 0.03 | 0.09 | 100 | 6.8 |
| BZX55B10 | 9.8 | 10.2 | 5 | 15 | 70 | 1 | 0.03 | 0.11 | 100 | 7.5 |
| BZX55B11 | 10.7 | 11.2 | 5 | 20 | 70 | 1 | 0.03 | 0.11 | 100 | 8.2 |
| BZX55B12 | 11.7 | 12.2 | 5 | 20 | 90 | 1 | 0.03 | 0.11 | 100 | 9.1 |
| BZX55B13 | 12.7 | 13.3 | 5 | 26 | 110 | 1 | 0.03 | 0.11 | 100 | 10 |
| BZX55B15 | 14.7 | 15.3 | 5 | 30 | 110 | 1 | 0.03 | 0.11 | 100 | 11 |
| BZX55B16 | 15.7 | 16.3 | 5 | 40 | 170 | 1 | 0.03 | 0.11 | 100 | 12 |
| BZX55B18 | 17.6 | 18.4 | 5 | 40 | 170 | 1 | 0.03 | 0.11 | 100 | 13 |
| BZX55B20 | 19.6 | 20.4 | 5 | 55 | 220 | 1 | 0.03 | 0.11 | 100 | 15 |
| BZX55B22 | 21.5 | 22.4 | 5 | 55 | 220 | 1 | 0.03 | 0.11 | 100 | 16 |
| BZX55B24 | 23.5 | 24.5 | 5 | 80 | 220 | 1 | 0.04 | 0.12 | 100 | 18 |
| BZX55B27 | 26.5 | 27.5 | 5 | 80 | 220 | 1 | 0.04 | 0.12 | 100 | 20 |
| BZX55B30 | 29 | 31 | 5 | 80 | 220 | 1 | 0.04 | 0.12 | 100 | 22 |
| BZX55B33 | 32 | 34 | 5 | 80 | 220 | 1 | 0.04 | 0.12 | 100 | 24 |
| BZX55B36 | 35 | 37 | 5 | 80 | 220 | 0.5 | 0.04 | 0.12 | 100 | 27 |
| BZX55B39 | 38 | 40 | 2.5 | 90 | 500 | 0.5 | 0.04 | 0.12 | 100 | 30 |
| BZX55B43 | 42 | 44 | 2.5 | 90 | 600 | 0.5 | 0.04 | 0.12 | 100 | 33 |
| BZX55B47 | 46 | 48 | 2.5 | 110 | 700 | 0.5 | 0.04 | 0.12 | 100 | 36 |
| BZX55B51 | 50 | 52 | 2.5 | 125 | 700 | 0.5 | 0.04 | 0.12 | 100 | 39 |
| BZX55B56 | 55 | 57 | 2.5 | 135 | 1000 | 0.5 | 0.04 | 0.12 | 100 | 43 |
| BZX55B62 | 61 | 63 | 2.5 | 150 | 1000 | 0.5 | 0.04 | 0.12 | 100 | 47 |
| BZX55B68 | 67 | 69 | 2.5 | 200 | 1000 | 0.5 | 0.04 | 0.12 | 100 | 51 |
| BZX55B75 | 74 | 77 | 2.5 | 250 | 1500 | 0.5 | 0.04 | 0.12 | 100 | 56 |
| BZX55B82 | 80 | 84 | 2.5 | 300 | 2000 | 0.5 | 0.04 | 0.12 | 100 | 62 |
| BZX55B91 | 89 | 93 | 2.5 | 450 | 5000 | 0.1 | 0.04 | 0.12 | 100 | 68 |
| BZX55B100 | 98 | 100 | 2.5 | 450 | 5000 | 0.1 | 0.04 | 0.12 | 100 | 75 |

Notes:

- 1. Tolerance and voltage designation:** the type numbers listed have zener voltage as shown. Measured with pulses tp=5.0ms, BZX55B-----±2% of V_{Znom}, BZX55C-----±5% of V_{Znom}.
- 2. Specials available include:** nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery.
- 3. Zener voltage (V_Z) measurement:** the zener voltage is measured under pulse conditions such that T_J is more than 2°C above T_A.
- 4. Zener impedance (Z_Z) derivation:** zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an RMS value equal to 10% of the dc zener current (I_{ZT}) is superimposed to I_{ZT}.

| PACKAGE | SPQ/PCS | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|---------|-----------|----------------|----------------|--------------|--------------|
| DO-35 | 5000/AMMO | 100000 | 41X28.5X38 | 14.57 | 13.07 |