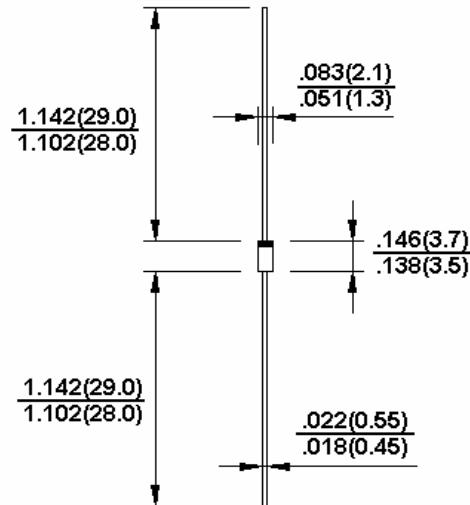


DO-35



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 @ IF = 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.



BZX55C SERIES

500mW Hermetically Sealed Glass Zener Voltage Regulators



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

| Device Type | V _Z at I _{ZT} (Volts) | | I _{ZT} mA | Z _{ZT} @ I _{ZT} Ohms Max | I _{ZK} mA | Z _{ZK} @ I _{ZK} Ohms Max | I _R @ V _R uA Max | V _R V |
|-------------|---|------|--------------------|--|--------------------|--|--|------------------|
| | Min | Max | | | | | | |
| BZX55C2V0 | 1.88 | 2.11 | 5.0 | 100 | 1.0 | 600 | 100 | 1.0 |
| BZX55C2V2 | 2.08 | 2.33 | 5.0 | 100 | 1.0 | 600 | 100 | 1.0 |
| BZX55C2V4 | 2.28 | 2.56 | 5.0 | 85 | 1.0 | 600 | 50 | 1.0 |
| BZX55C2V7 | 2.51 | 2.89 | 5.0 | 85 | 1.0 | 600 | 10 | 1.0 |
| BZX55C3V0 | 2.8 | 3.2 | 5.0 | 85 | 1.0 | 600 | 4.0 | 1.0 |
| BZX55C3V3 | 3.1 | 3.5 | 5.0 | 85 | 1.0 | 600 | 2.0 | 1.0 |
| BZX55C3V6 | 3.4 | 3.8 | 5.0 | 85 | 1.0 | 600 | 2.0 | 1.0 |
| BZX55C3V9 | 3.7 | 4.1 | 5.0 | 85 | 1.0 | 600 | 2.0 | 1.0 |
| BZX55C4V3 | 4.0 | 4.6 | 5.0 | 75 | 1.0 | 600 | 1.0 | 1.0 |
| BZX55C4V7 | 4.4 | 5.0 | 5.0 | 60 | 1.0 | 600 | 0.5 | 1.0 |
| BZX55C5V1 | 4.8 | 5.4 | 5.0 | 35 | 1.0 | 550 | 0.1 | 1.0 |
| BZX55C5V6 | 5.2 | 6.0 | 5.0 | 25 | 1.0 | 450 | 0.1 | 1.0 |
| BZX55C6V2 | 5.8 | 6.6 | 5.0 | 10 | 1.0 | 200 | 0.1 | 2.0 |
| BZX55C6V8 | 6.4 | 7.2 | 5.0 | 8 | 1.0 | 150 | 0.1 | 3.0 |
| BZX55C7V5 | 7.0 | 7.9 | 5.0 | 7 | 1.0 | 50 | 0.1 | 5.0 |
| BZX55C8V2 | 7.7 | 8.7 | 5.0 | 7 | 1.0 | 50 | 0.1 | 6.2 |
| BZX55C9V1 | 8.5 | 9.6 | 5.0 | 10 | 1.0 | 50 | 0.1 | 6.8 |
| BZX55C10 | 9.4 | 10.6 | 5.0 | 15 | 1.0 | 70 | 0.1 | 7.5 |
| BZX55C11 | 10.4 | 11.6 | 5.0 | 20 | 1.0 | 70 | 0.1 | 8.2 |
| BZX55C12 | 11.4 | 12.7 | 5.0 | 20 | 1.0 | 90 | 0.1 | 9.1 |
| BZX55C13 | 12.4 | 14.1 | 5.0 | 26 | 1.0 | 110 | 0.1 | 10 |
| BZX55C15 | 13.8 | 15.6 | 5.0 | 30 | 1.0 | 110 | 0.1 | 11 |
| BZX55C16 | 15.3 | 17.1 | 5.0 | 40 | 1.0 | 170 | 0.1 | 12 |
| BZX55C18 | 16.8 | 19.1 | 5.0 | 50 | 1.0 | 170 | 0.1 | 14 |
| BZX55C20 | 18.8 | 21.2 | 5.0 | 55 | 1.0 | 220 | 0.1 | 15 |
| BZX55C22 | 20.8 | 23.3 | 5.0 | 55 | 1.0 | 220 | 0.1 | 17 |
| BZX55C24 | 22.8 | 25.6 | 5.0 | 80 | 1.0 | 220 | 0.1 | 18 |
| BZX55C27 | 25.1 | 28.9 | 5.0 | 80 | 1.0 | 220 | 0.1 | 20 |
| BZX55C30 | 28 | 32 | 5.0 | 80 | 1.0 | 220 | 0.1 | 22 |
| BZX55C33 | 31 | 35 | 5.0 | 80 | 1.0 | 220 | 0.1 | 24 |
| BZX55C36 | 34 | 38 | 5.0 | 80 | 1.0 | 220 | 0.1 | 27 |
| BZX55C39 | 37 | 41 | 2.5 | 90 | 0.5 | 500 | 0.1 | 28 |
| BZX55C43 | 40 | 46 | 2.5 | 90 | 0.5 | 600 | 0.1 | 32 |
| BZX55C47 | 44 | 50 | 2.5 | 110 | 0.5 | 700 | 0.1 | 35 |
| BZX55C51 | 48 | 54 | 2.5 | 125 | 0.5 | 700 | 0.1 | 38 |
| BZX55C56 | 52 | 60 | 2.5 | 135 | 0.5 | 1000 | 0.1 | 42 |
| BZX55C62 | 58 | 66 | 2.5 | 150 | 0.5 | 1000 | 0.1 | 47 |
| BZX55C68 | 64 | 72 | 2.5 | 160 | 0.5 | 1000 | 0.1 | 51 |
| BZX55C75 | 70 | 80 | 2.5 | 170 | 0.5 | 1000 | 0.1 | 56 |

- Notes:
1. Tolerance and voltage designation: the type numbers listed have zener voltage as shown.
 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 |