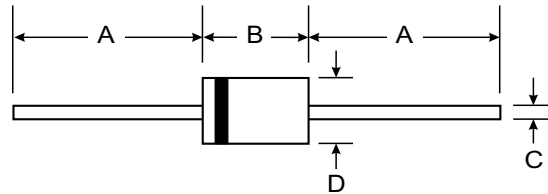


Features

- Complete voltage range 3.9 to 200 V
- For use in stabilizing and clipping circuits with high power rating.
- Smaller voltage tolerances are available upon request.



Mechanical Data

- Case: JEDEC DO-41, molded plastic
- Terminals: Axial leads solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Weight: 0.012 ounces, 0.34 grams
- Mounting position: any

| DO-41 | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | 4.06 | 5.21 |
| C | 0.71 | 0.864 |
| D | 2.00 | 2.72 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Parameter | Symbol | Value | Unit |
|--|-----------------|-------------|------|
| Power dissipation at $T_A=60$ (Note 1) | P_{tot} | 1.5 | W |
| Maximum thermal resistance junction to ambient | $R_{\theta JA}$ | 60 | K/W |
| Junction temperature | T_J | -55 to +150 | |
| Storage temperature range | T_{STG} | -55 to +150 | |

Electrical Characteristics

| Part Number | Device marking code | Zener Voltage Range ¹⁾ | | Dynamic Resistance | Temperature Coefficient of Zener Voltage | Test Current | Leakage Current | Reverse Voltage | Admis. Zener Current | |
|-------------|---------------------|-----------------------------------|------|---------------------------|--|--------------|-----------------|-----------------|-----------------------------|--------------------|
| | | $V_Z @ I_{ZT}$ | | $r_{zj} @ I_{ZT}, f=1kHz$ | @ I_{ZT} | I_{ZT} | I_R | V_R | $I_Z @ T_{amb}=60^{\circ}C$ | $I_{ZSM}, tp=10ms$ |
| | | V | V | Ω | $Avz(10^{-4}/K)$ | m A | μA | V | m A | A |
| | | Min. | Max. | | typ | | | | | |
| BZY97C3V9 | Y3V9 | 3.7 | 4.1 | 7.0 | -0.025 | 100 | 15 | 1.0 | 366 | 3.7 |
| BZY97C4V3 | Y4V3 | 4.0 | 4.6 | 7.0 | -0.020 | 100 | 10 | 1.0 | 327 | 3.4 |
| BZY97C4V7 | Y4V7 | 4.4 | 5.0 | 7.0 | -0.020 | 100 | 5.0 | 1.0 | 300 | 3.1 |
| BZY97C5V1 | Y5V1 | 4.8 | 5.4 | 5.0 | -0.010 | 100 | 3.0 | 1.0 | 278 | 2.8 |
| BZY97C5V6 | Y5V6 | 5.2 | 6.0 | 2.0 | 0.020 | 100 | 1.0 | 1.0 | 250 | 2.6 |
| BZY97C6V2 | Y6V2 | 5.8 | 6.6 | 2.0 | 0.050 | 100 | 1.0 | 1.0 | 227 | 2.3 |
| BZY97C6V8 | Y6V8 | 6.4 | 7.2 | 2.0 | 0.350 | 100 | 1.0 | 1.0 | 208 | 2.1 |
| BZY97C7V5 | Y7V5 | 7.0 | 7.9 | 2.0 | 0.350 | 100 | 1.0 | 2.0 | 190 | 1.9 |
| BZY97C8V2 | Y8V2 | 7.7 | 8.7 | 2.0 | 0.055 | 100 | 1.0 | 3.5 | 175 | 1.8 |
| BZY97C9V1 | Y9V1 | 8.5 | 9.6 | 4.0 | 0.055 | 50 | 1.0 | 3.5 | 156 | 1.6 |
| BZY97C10 | Y10 | 9.4 | 10.6 | 4.0 | 0.070 | 50 | 1.0 | 5.0 | 142 | 1.4 |
| BZY97C11 | Y11 | 10.4 | 11.6 | 7.0 | +5 to +10 | 50 | 1.0 | 5.0 | 129 | 1.3 |
| BZY97C12 | Y12 | 11.4 | 12.7 | 7.0 | +5 to +10 | 50 | 1.0 | 7.0 | 118 | 1.2 |
| BZY97C13 | Y13 | 12.4 | 14.1 | 10 | +5 to +10 | 50 | 1.0 | 7.0 | 106 | 1.1 |
| BZY97C15 | Y15 | 13.8 | 15.8 | 10 | +5 to +10 | 50 | 1.0 | 10 | 96 | 1.0 |
| BZY97C16 | Y16 | 15.3 | 17.1 | 15 | +6 to +11 | 25 | 1.0 | 10 | 88 | 0.90 |
| BZY97C18 | Y18 | 16.8 | 19.1 | 15 | +6 to +11 | 25 | 1.0 | 10 | 79 | 0.81 |
| BZY97C20 | Y20 | 18.8 | 21.2 | 15 | +6 to +11 | 25 | 1.0 | 10 | 71 | 0.73 |
| BZY97C22 | Y22 | 20.8 | 23.3 | 15 | +6 to +11 | 25 | 1.0 | 12 | 64 | 0.66 |
| BZY97C24 | Y24 | 22.8 | 25.6 | 15 | +6 to +11 | 25 | 1.0 | 12 | 59 | 0.60 |
| BZY97C27 | Y27 | 25.1 | 28.9 | 15 | +6 to +11 | 25 | 1.0 | 14 | 52 | 0.53 |
| BZY97C30 | Y30 | 28 | 32 | 15 | +6 to +11 | 25 | 1.0 | 14 | 47 | 0.48 |
| BZY97C33 | Y33 | 31 | 35 | 15 | +6 to +11 | 25 | 1.0 | 17 | 43 | 0.44 |
| BZY97C36 | Y36 | 34 | 38 | 40 | +6 to +11 | 10 | 1.0 | 17 | 40 | 0.4 |
| BZY97C39 | Y39 | 37 | 41 | 40 | +6 to +11 | 10 | 1.0 | 20 | 37 | 0.38 |
| BZY97C43 | Y43 | 40 | 46 | 45 | +7 to +12 | 10 | 1.0 | 20 | 33 | 0.33 |
| BZY97C47 | Y47 | 44 | 50 | 45 | +7 to +12 | 10 | 1.0 | 24 | 30 | 0.31 |
| BZY97C51 | Y51 | 48 | 54 | 60 | +7 to +12 | 10 | 1.0 | 24 | 28 | 0.28 |
| BZY97C56 | Y56 | 52 | 60 | 60 | +7 to +12 | 10 | 1.0 | 28 | 25 | 0.26 |
| BZY97C62 | Y62 | 58 | 66 | 80 | +7 to +12 | 10 | 1.0 | 28 | 23 | 0.23 |
| BZY97C68 | Y68 | 64 | 72 | 80 | +7 to +12 | 10 | 1.0 | 34 | 21 | 0.21 |
| BZY97C75 | Y75 | 70 | 79 | 100 | +7 to +12 | 10 | 1.0 | 34 | 19 | 0.19 |
| BZY97C82 | Y82 | 77 | 88 | 100 | +7 to +12 | 10 | 1.0 | 41 | 17 | 0.18 |
| BZY97C91 | Y91 | 85 | 96 | 200 | +8 to +13 | 5.0 | 1.0 | 41 | 16 | 0.16 |
| BZY97C100 | Y100 | 94 | 106 | 200 | +8 to +13 | 5.0 | 1.0 | 50 | 14 | 0.15 |
| BZY97C110 | Y110 | 104 | 116 | 250 | +8 to +13 | 5.0 | 1.0 | 50 | 13 | 0.13 |
| BZY97C120 | Y120 | 114 | 127 | 250 | +8 to +13 | 5.0 | 1.0 | 60 | 12 | 0.12 |
| BZY97C130 | Y130 | 124 | 141 | 300 | +8 to +13 | 5.0 | 1.0 | 60 | 11 | 0.11 |
| BZY97C150 | Y150 | 138 | 156 | 300 | +8 to +13 | 5.0 | 1.0 | 75 | 10 | 0.10 |
| BZY97C160 | Y160 | 153 | 171 | 350 | +8 to +13 | 5.0 | 1.0 | 75 | 9.0 | 0.09 |
| BZY97C180 | Y180 | 168 | 191 | 350 | +8 to +13 | 5.0 | 1.0 | 90 | 8.0 | 0.08 |
| BZY97C200 | Y200 | 188 | 212 | 350 | +8 to +13 | 5.0 | 1.0 | 90 | 7.0 | 0.07 |