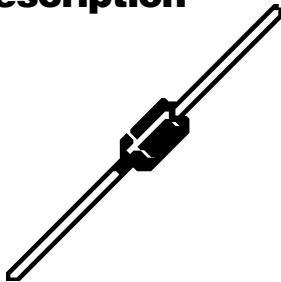


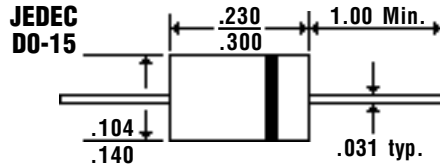
2 Watt ZENER DIODES (3.3V to 200V)

BZY47C3V3...C200

Description



Mechanical Dimensions

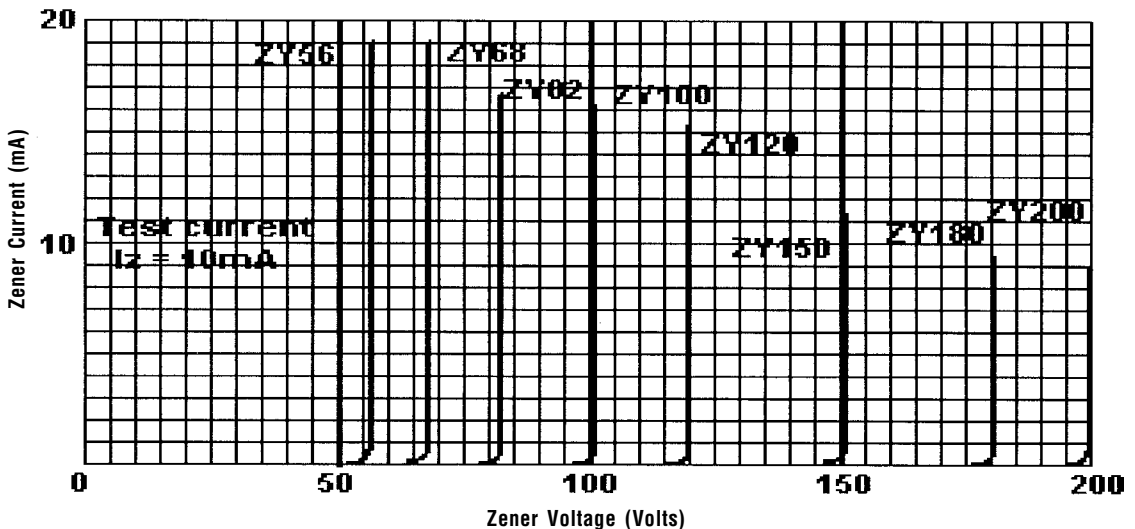


Features

- PRO ELECTRON REGISTRATION
- WIDE VOLTAGE RANGE...3.3 to 200V
- HIGH SURGE CAPABILITY...50 W @ 10mA
- MEETS UL SPECIFICATION 94V-0

| Maximum Ratings | BZY47C3V3...C200 | Units |
|--|------------------|-----------------------------|
| DC Power Dissipation with $T_A = > = 70^\circ\text{C}$... P_D | 2.0 | W |
| Junction to Ambient Thermal Resistance... $R_{\theta JA}$ | 52.5 | $^\circ\text{C} / \text{W}$ |
| Lead Temperature... T_L | 300 | $^\circ\text{C}$ |
| Operating & Storage Temperature Range... T_J, T_{STRG} | -65 to 175 | $^\circ\text{C}$ |

Breakdown Characteristics



Electrical Characteristics @ 25°C.

| Part# | Zener Voltage Range | Test Current I _{zT} | MAX. ZENER IMPEDANCE Z _{zt} @ I _{zt} Ohms | Typical Temp. Coeff. %/°C | MIN. REVERSE VOLTAGE I _s = 1uA | MAX. REGULATOR CURRENT @ 45°C I _{ZR} |
|------------|---------------------|------------------------------|---|---------------------------|---|---|
| BZY47-C3V3 | 3.1 - 3.5 | 100 | 3.8 | - 0.06 | 0.5 | 435 |
| BZY47-C3V6 | 3.4 - 3.8 | 100 | 3.8 | - 0.06 | 0.5 | 385 |
| BZY47-C3V9 | 3.7 - 4.1 | 100 | 3.8 | - 0.06 | 0.5 | 345 |
| BZY47-C4V3 | 4.0 - 4.6 | 100 | 3.8 | +/- 0.03 | 1.0 | 320 |
| BZY47-C4V7 | 4.4 - 5.0 | 100 | 3.8 | +/- 0.03 | 1.0 | 310 |
| BZY47-C5V1 | 4.8 - 5.4 | 100 | 2 | +/- 0.035 | 1.0 | 280 |
| BZY47-C5V6 | 5.2 - 6.0 | 100 | 1 | +/- 0.035 | 2.0 | 255 |
| BZY47-C6V2 | 5.8 - 6.6 | 100 | 1 | +/- 0.035 | 2.0 | 235 |
| BZY47-C6V8 | 6.4 - 7.2 | 100 | 1 | +/- 0.035 | 2.0 | 220 |
| BZY47-C7V5 | 7.0 - 7.9 | 100 | 2 | +/- 0.035 | 2.0 | 200 |
| BZY47-C8V2 | 7.7 - 8.7 | 50 | 2 | +/- 0.055 | 3.5 | 180 |
| BZY47-C9V1 | 8.5 - 9.6 | 50 | 4 | +/- 0.065 | 3.5 | 165 |
| BZY47-C10 | 9.4 - 10.6 | 50 | 4 | +/- 0.070 | 5.0 | 145 |
| BZY47-C11 | 10.4 - 11.6 | 50 | 7 | +/- 0.075 | 5.0 | 135 |
| BZY47-C12 | 11.4 - 12.7 | 50 | 7 | +/- 0.075 | 7.0 | 120 |
| BZY47-C13 | 12.4 - 14.1 | 50 | 10 | +/- 0.075 | 7.0 | 110 |
| BZY47-C15 | 13.8 - 15.8 | 50 | 10 | +/- 0.075 | 10 | 98 |
| BZY47-C16 | 15.3 - 17.1 | 25 | 15 | +/- 0.085 | 10 | 90 |
| BZY47-C18 | 16.8 - 19.1 | 25 | 15 | +/- 0.085 | 10 | 80 |
| BZY47-C20 | 18.8 - 21.2 | 25 | 15 | +/- 0.085 | 10 | 72 |
| BZY47-C22 | 20.8 - 23.3 | 25 | 15 | +/- 0.085 | 12 | 66 |
| BZY47-C24 | 22.8 - 25.6 | 25 | 15 | +/- 0.085 | 12 | 50 |
| BZY47-C27 | 25.1 - 28.9 | 25 | 15 | +/- 0.085 | 14 | 53 |
| BZY47-C30 | 28 - 32 | 25 | 15 | +/- 0.085 | 14 | 48 |
| BZY47-C33 | 31 - 35 | 25 | 15 | +/- 0.085 | 17 | 44 |
| BZY47-C36 | 34 - 38 | 10 | 40 | +/- 0.085 | 17 | 40 |
| BZY47-C39 | 37 - 41 | 10 | 40 | +/- 0.085 | 20 | 37 |
| BZY47-C43 | 40 - 46 | 10 | 45 | +/- 0.095 | 20 | 33 |
| BZY47-C47 | 44 - 50 | 10 | 45 | +/- 0.095 | 24 | 30 |
| BZY47-C51 | 48 - 54 | 10 | 60 | +/- 0.095 | 24 | 27 |
| BZY47-C56 | 52 - 60 | 10 | 60 | +/- 0.095 | 28 | 25 |
| BZY47-C62 | 58 - 66 | 10 | 80 | +/- 0.105 | 28 | 21 |
| BZY47-C68 | 64 - 72 | 10 | 80 | +/- 0.105 | 34 | 20 |
| BZY47-C75 | 70 - 79 | 10 | 100 | +/- 0.105 | 34 | 18 |
| BZY47-C82 | 77 - 88 | 10 | 100 | +/- 0.105 | 41 | 16 |
| BZY47-C91 | 85 - 96 | 5 | 200 | +/- 0.11 | 41 | 15 |
| BZY47-C100 | 94 - 106 | 5 | 200 | +/- 0.11 | 50 | 13 |
| BZY47-C110 | 104 - 116 | 5 | 250 | +/- 0.11 | 50 | 12 |
| BZY47-C120 | 114 - 127 | 5 | 250 | +/- 0.11 | 60 | 11 |
| BZY47-C130 | 124 - 141 | 5 | 300 | +/- 0.11 | 60 | 10 |
| BZY47-C150 | 138 - 156 | 5 | 300 | +/- 0.11 | 75 | 9 |
| BZY47-C160 | 153 - 171 | 5 | 350 | +/- 0.11 | 75 | 8.5 |
| BZY47-C180 | 168 - 191 | 5 | 350 | +/- 0.11 | 90 | 8.0 |
| BZY47-C200 | 188 - 212 | 5 | 350 | +/- 0.11 | 90 | 7.5 |