

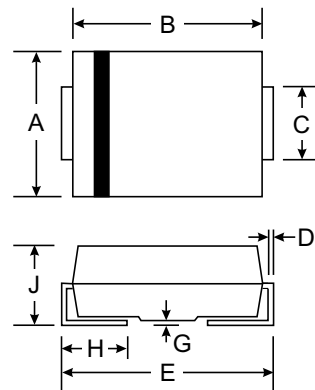
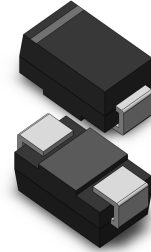
VOLTAGE RANGE: 3.3V - 100V
POWER: 1.0Watts

Features

- Complete voltage range 3.3 to 100 volts
- High peak reverse power dissipation
- High reliability
- Low leakage current
- Standard zener voltage tolerance is $\pm 5\%$.

Mechanical Data

- Case : SMA(DO-214AC) Molded plastic
- Epoxy : UL94V-O rate flameretardant
- Lead : Lead formed for Surface mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 0.064 grams (approx.)



| SMA(DO-214AC) | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 2.29 | 2.92 |
| B | 4.00 | 4.60 |
| C | 1.27 | 1.63 |
| D | 0.15 | 0.31 |
| E | 4.80 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.01 | 2.62 |
| All Dimensions in mm | | |

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

| Rating | Symbol | Value | Unit |
|--|--------|---------------|------------------|
| DC Power Dissipation at $T_L = 75^\circ\text{C}$ (Note1) | P_D | 1.0 | W |
| Maximum Forward Voltage at $I_F = 200\text{ mA}$ | V_F | 1.2 | V |
| Junction Temperature Range | T_J | - 55 to + 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_S | - 55 to + 150 | $^\circ\text{C}$ |

Note :

(1) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.



ELECTRICAL CHARACTERISTICS Rating at 25 °C ambient temperature unless otherwise specified

| Type | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current | Maximum Surge Current |
|-----------|-------------------------|------|-------------------------|-----------|------|---------------------------------|------|--------------------------|-----------------------|
| | Vz ⁽¹⁾ @ IZT | IZT | ZZT @ IZT | Zzk @ Izk | Izk | IR @ VR | | IZM | IRM ⁽²⁾ |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μA) | (V) | (mA) | |
| BZG01C3.3 | 3.3 | 76.0 | 10 | 400 | 1.0 | 100 | 1.0 | 276 | 1380 |
| BZG01C3.6 | 3.6 | 69.0 | 10 | 400 | 1.0 | 100 | 1.0 | 252 | 1260 |
| BZG01C3.9 | 3.9 | 64.0 | 9.0 | 400 | 1.0 | 50 | 1.0 | 234 | 1190 |
| BZG01C4.3 | 4.3 | 58.0 | 9.0 | 400 | 1.0 | 10 | 1.0 | 217 | 1070 |
| BZG01C4.7 | 4.7 | 53.0 | 8.0 | 500 | 1.0 | 10 | 1.0 | 193 | 970 |
| BZG01C5.1 | 5.1 | 49.0 | 7.0 | 550 | 1.0 | 10 | 1.0 | 178 | 890 |
| BZG01C5.6 | 5.6 | 45.0 | 5.0 | 600 | 1.0 | 10 | 2.0 | 162 | 810 |
| BZG01C6.2 | 6.2 | 41.0 | 2.0 | 700 | 1.0 | 10 | 3.0 | 146 | 730 |
| BZG01C6.8 | 6.8 | 37.0 | 3.5 | 700 | 1.0 | 10 | 4.0 | 133 | 660 |
| BZG01C7.5 | 7.5 | 34.0 | 4.0 | 700 | 0.5 | 10 | 5.0 | 121 | 605 |
| BZG01C8.2 | 8.2 | 31.0 | 4.5 | 700 | 0.5 | 10 | 6.0 | 110 | 550 |
| BZG01C9.1 | 9.1 | 28.0 | 5.0 | 700 | 0.5 | 10 | 7.0 | 100 | 500 |
| BZG01C10 | 10 | 25.0 | 7.0 | 700 | 0.25 | 10 | 7.6 | 91 | 454 |
| BZG01C11 | 11 | 23.0 | 8.0 | 700 | 0.25 | 5.0 | 8.4 | 83 | 414 |
| BZG01C12 | 12 | 21.0 | 9.0 | 700 | 0.25 | 5.0 | 9.1 | 76 | 380 |
| BZG01C13 | 13 | 19.0 | 10 | 700 | 0.25 | 5.0 | 9.9 | 69 | 344 |
| BZG01C15 | 15 | 17.0 | 14 | 700 | 0.25 | 5.0 | 11.4 | 61 | 305 |
| BZG01C16 | 16 | 15.5 | 16 | 700 | 0.25 | 5.0 | 12.2 | 57 | 285 |
| BZG01C18 | 18 | 14.0 | 20 | 750 | 0.25 | 5.0 | 13.7 | 50 | 250 |
| BZG01C20 | 20 | 12.5 | 22 | 750 | 0.25 | 5.0 | 15.2 | 45 | 225 |
| BZG01C22 | 22 | 11.5 | 23 | 750 | 0.25 | 5.0 | 16.7 | 41 | 205 |
| BZG01C24 | 24 | 10.5 | 25 | 750 | 0.25 | 5.0 | 18.2 | 38 | 190 |
| BZG01C27 | 27 | 9.5 | 35 | 750 | 0.25 | 5.0 | 20.6 | 34 | 170 |
| BZG01C30 | 30 | 8.5 | 40 | 1000 | 0.25 | 5.0 | 22.8 | 30 | 150 |
| BZG01C33 | 33 | 7.5 | 45 | 1000 | 0.25 | 5.0 | 25.1 | 27 | 135 |
| BZG01C36 | 36 | 7.0 | 50 | 1000 | 0.25 | 5.0 | 27.4 | 25 | 125 |
| BZG01C39 | 39 | 6.5 | 60 | 1000 | 0.25 | 5.0 | 29.7 | 23 | 115 |
| BZG01C43 | 43 | 6.0 | 70 | 1500 | 0.25 | 5.0 | 32.7 | 22 | 110 |
| BZG01C47 | 47 | 5.5 | 80 | 1500 | 0.25 | 5.0 | 35.8 | 19 | 95 |
| BZG01C51 | 51 | 5.0 | 95 | 1500 | 0.25 | 5.0 | 38.8 | 18 | 90 |
| BZG01C56 | 56 | 4.5 | 110 | 2000 | 0.25 | 5.0 | 42.6 | 16 | 80 |
| BZG01C62 | 62 | 4.0 | 125 | 2000 | 0.25 | 5.0 | 47.1 | 14 | 70 |
| BZG01C68 | 68 | 3.7 | 150 | 2000 | 0.25 | 5.0 | 51.7 | 13 | 65 |
| BZG01C75 | 75 | 3.3 | 175 | 2000 | 0.25 | 5.0 | 56.0 | 12 | 60 |
| BZG01C82 | 82 | 3.0 | 200 | 3000 | 0.25 | 5.0 | 62.2 | 11 | 55 |
| BZG01C91 | 91 | 2.8 | 250 | 3000 | 0.25 | 5.0 | 69.2 | 10 | 50 |
| BZG01C100 | 100 | 2.5 | 350 | 3000 | 0.25 | 5.0 | 76.0 | 9.0 | 45 |

Notes :

- (1) Standard voltage tolerance is ± 5%, No Suffix ± 10%
- (2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method
- (3) " SML " will be omitted in marking on the diode.