

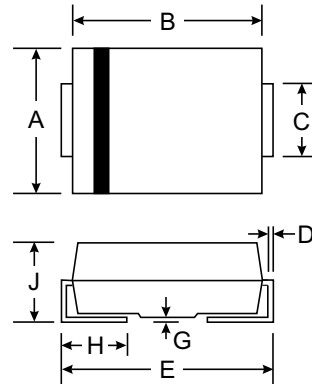
VOLTAGE RANGE: 3.3 - 300V
POWER: 1.0Watts

Features

- Complete Voltage Range 3.3 to 300 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- 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

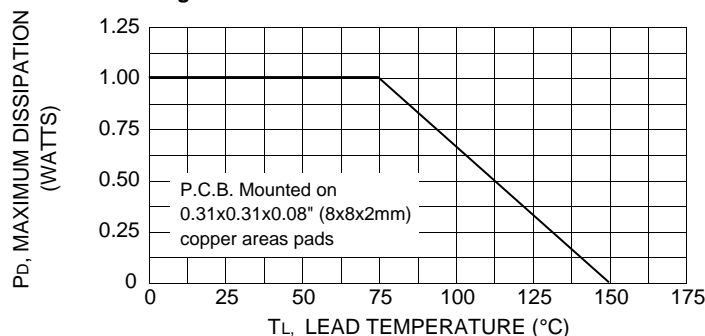
Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

| 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 pad

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING





ELECTRICAL CHARACTERISTICS (Ta = 25 °C 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) | (mApk) |
| SZ153D | 3.3 | 76.0 | 10 | 400 | 1.0 | 100 | 1.0 | 276 | 1380 |
| SZ153G | 3.6 | 69.0 | 10 | 400 | 1.0 | 100 | 1.0 | 252 | 1260 |
| SZ153J | 3.9 | 64.0 | 9.0 | 400 | 1.0 | 50 | 1.0 | 234 | 1190 |
| SZ154D | 4.3 | 58.0 | 9.0 | 400 | 1.0 | 10 | 1.0 | 217 | 1070 |
| SZ154H | 4.7 | 53.0 | 8.0 | 500 | 1.0 | 10 | 1.0 | 193 | 970 |
| SZ155B | 5.1 | 49.0 | 7.0 | 550 | 1.0 | 10 | 1.0 | 178 | 890 |
| SZ155G | 5.6 | 45.0 | 5.0 | 600 | 1.0 | 10 | 2.0 | 162 | 810 |
| SZ156C | 6.2 | 41.0 | 2.0 | 700 | 1.0 | 10 | 3.0 | 146 | 730 |
| SZ156I | 6.8 | 37.0 | 3.5 | 700 | 1.0 | 10 | 4.0 | 133 | 660 |
| SZ157F | 7.5 | 34.0 | 4.0 | 700 | 0.5 | 10 | 5.0 | 121 | 605 |
| SZ158C | 8.2 | 31.0 | 4.5 | 700 | 0.5 | 10 | 6.0 | 110 | 550 |
| SZ159B | 9.1 | 28.0 | 5.0 | 700 | 0.5 | 10 | 7.0 | 100 | 500 |
| SZ1510 | 10 | 25.0 | 7.0 | 700 | 0.25 | 10 | 7.6 | 91 | 454 |
| SZ1511 | 11 | 23.0 | 8.0 | 700 | 0.25 | 5.0 | 8.4 | 83 | 414 |
| SZ1512 | 12 | 21.0 | 9.0 | 700 | 0.25 | 5.0 | 9.1 | 76 | 380 |
| SZ1513 | 13 | 19.0 | 10 | 700 | 0.25 | 5.0 | 9.9 | 69 | 344 |
| SZ1515 | 15 | 17.0 | 14 | 700 | 0.25 | 5.0 | 11.4 | 61 | 305 |
| SZ1516 | 16 | 15.5 | 16 | 700 | 0.25 | 5.0 | 12.2 | 57 | 285 |
| SZ1518 | 18 | 14.0 | 20 | 750 | 0.25 | 5.0 | 13.7 | 50 | 250 |
| SZ1520 | 20 | 12.5 | 22 | 750 | 0.25 | 5.0 | 15.2 | 45 | 225 |
| SZ1522 | 22 | 11.5 | 23 | 750 | 0.25 | 5.0 | 16.7 | 41 | 205 |
| SZ1524 | 24 | 10.5 | 25 | 750 | 0.25 | 5.0 | 18.2 | 38 | 190 |
| SZ1527 | 27 | 9.5 | 35 | 750 | 0.25 | 5.0 | 20.6 | 34 | 170 |
| SZ1530 | 30 | 8.5 | 40 | 1000 | 0.25 | 5.0 | 22.8 | 30 | 150 |
| SZ1533 | 33 | 7.5 | 45 | 1000 | 0.25 | 5.0 | 25.1 | 27 | 135 |
| SZ1536 | 36 | 7.0 | 50 | 1000 | 0.25 | 5.0 | 27.4 | 25 | 125 |
| SZ1539 | 39 | 6.5 | 60 | 1000 | 0.25 | 5.0 | 29.7 | 23 | 115 |
| SZ1543 | 43 | 6.0 | 70 | 1500 | 0.25 | 5.0 | 32.7 | 22 | 110 |
| SZ1547 | 47 | 5.5 | 80 | 1500 | 0.25 | 5.0 | 35.8 | 19 | 95 |
| SZ1551 | 51 | 5.0 | 95 | 1500 | 0.25 | 5.0 | 38.8 | 18 | 90 |
| SZ1556 | 56 | 4.5 | 110 | 2000 | 0.25 | 5.0 | 42.6 | 16 | 80 |
| SZ1562 | 62 | 4.0 | 125 | 2000 | 0.25 | 5.0 | 47.1 | 14 | 70 |
| SZ1568 | 68 | 3.7 | 150 | 2000 | 0.25 | 5.0 | 51.7 | 13 | 65 |
| SZ1575 | 75 | 3.3 | 175 | 2000 | 0.25 | 5.0 | 56.0 | 12 | 60 |
| SZ1582 | 82 | 3.0 | 200 | 3000 | 0.25 | 5.0 | 62.2 | 11 | 55 |
| SZ1591 | 91 | 2.8 | 250 | 3000 | 0.25 | 5.0 | 69.2 | 10 | 50 |
| SZ15B0 | 100 | 2.5 | 350 | 3000 | 0.25 | 5.0 | 76.0 | 9.0 | 45 |
| SZ15B1 | 110 | 2.3 | 450 | 4000 | 0.25 | 5.0 | 83.6 | 8.6 | 40 |
| SZ15B2 | 120 | 2.0 | 550 | 4500 | 0.25 | 5.0 | 91.2 | 7.8 | 37 |
| SZ15B3 | 130 | 1.9 | 700 | 5000 | 0.25 | 5.0 | 98.8 | 7.0 | 34 |
| SZ15B5 | 150 | 1.7 | 1000 | 6000 | 0.25 | 5.0 | 114.0 | 6.4 | 30 |
| SZ15B6 | 160 | 1.6 | 1100 | 6500 | 0.25 | 5.0 | 121.6 | 5.8 | 28 |
| SZ15B8 | 180 | 1.4 | 1200 | 7000 | 0.25 | 5.0 | 136.8 | 5.2 | 25 |
| SZ15D0 | 200 | 1.2 | 1500 | 8000 | 0.25 | 5.0 | 152.0 | 4.7 | 22 |
| SZ15D2 | 220 | 1.0 | 1600 | 8000 | 0.25 | 5.0 | 167.2 | 4.0 | 20 |
| SZ15D4 | 240 | 0.93 | 1800 | 8500 | 0.25 | 5.0 | 182.4 | 3.8 | 18.5 |
| SZ15D5 | 250 | 0.90 | 2000 | 9000 | 0.25 | 5.0 | 190 | 3.6 | 18 |
| SZ15D7 | 270 | 0.82 | 2100 | 9000 | 0.25 | 5.0 | 205 | 3.3 | 16.5 |
| SZ15E0 | 300 | 0.75 | 2300 | 9500 | 0.25 | 5.0 | 228 | 3.0 | 15 |

Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of ±10%, altered the fourth number of type from " 0 " for ±10% tolerance to be " 5 " for ±5.0% tolerance.