

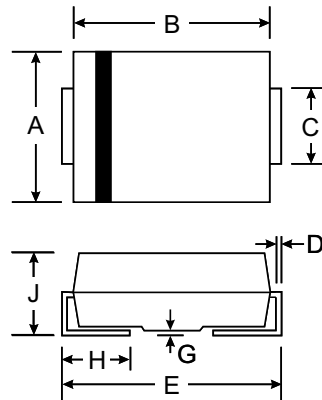
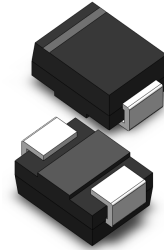
VOLTAGE RANGE: 3.6 - 200V
POWER: 2.0Watts

Features

- Complete Voltage Range 3.6 to 200 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



| SMB(DO-214AA) | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 3.30 | 3.94 |
| B | 4.06 | 4.70 |
| C | 1.91 | 2.21 |
| D | 0.15 | 0.31 |
| E | 5.00 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.00 | 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 | 2.0 | Watts |
| Maximum Forward Voltage at $I_F = 200\text{ mA}$ | V_F | 1.2 | Volts |
| Maximum Thermal Resistance Junction to Ambient Air (Note2) | $R_{\theta JA}$ | 60 | K / W |
| Junction Temperature Range | T_J | - 55 to + 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_S | - 55 to + 175 | $^\circ\text{C}$ |

Note :

- (1) T_L = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.



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 |
|----------|-----------------------|------|-------------------------|-----------|------|---------------------------------|-------|--------------------------|
| | Vz @ IzT | IzT | ZzT @ IzT | Zzk @ Izk | Izk | IR @ VR | | IzM |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μA) | (V) | (mA) |
| Z2SMB3V6 | 3.6 | 139 | 5.0 | 400 | 1.0 | 80 | 1.0 | 504 |
| Z2SMB3V9 | 3.9 | 128 | 5.0 | 400 | 1.0 | 30 | 1.0 | 468 |
| Z2SMB4V3 | 4.3 | 116 | 4.5 | 400 | 1.0 | 20 | 1.0 | 434 |
| Z2SMB4V7 | 4.7 | 106 | 4.5 | 550 | 1.0 | 5.0 | 1.0 | 386 |
| Z2SMB5V1 | 5.1 | 98.0 | 3.5 | 600 | 1.0 | 5.0 | 1.0 | 356 |
| Z2SMB5V6 | 5.6 | 89.5 | 2.5 | 500 | 1.0 | 5.0 | 2.0 | 324 |
| Z2SMB6V2 | 6.2 | 80.5 | 1.5 | 700 | 1.0 | 5.0 | 3.0 | 292 |
| Z2SMB6V8 | 6.8 | 73.5 | 2.0 | 700 | 1.0 | 5.0 | 4.0 | 266 |
| Z2SMB7V5 | 7.5 | 66.5 | 2.0 | 700 | 0.5 | 50 | 5.0 | 242 |
| Z2SMB8V2 | 8.2 | 61.0 | 2.3 | 700 | 0.5 | 50 | 6.0 | 220 |
| Z2SMB9V1 | 9.1 | 55.0 | 2.5 | 700 | 0.5 | 50 | 7.0 | 200 |
| Z2SMB10 | 10 | 50.0 | 3.5 | 700 | 0.25 | 50 | 7.6 | 182 |
| Z2SMB11 | 11 | 45.5 | 4.0 | 700 | 0.25 | 50 | 8.4 | 166 |
| Z2SMB12 | 12 | 41.5 | 4.5 | 700 | 0.25 | 1.0 | 9.1 | 152 |
| Z2SMB13 | 13 | 38.5 | 5.0 | 700 | 0.25 | 0.5 | 9.9 | 138 |
| Z2SMB14 | 14 | 35.7 | 5.5 | 700 | 0.25 | 0.5 | 10.6 | 130 |
| Z2SMB15 | 15 | 33.4 | 7.0 | 700 | 0.25 | 0.5 | 11.4 | 122 |
| Z2SMB16 | 16 | 31.2 | 8.0 | 700 | 0.25 | 0.5 | 12.2 | 114 |
| Z2SMB17 | 17 | 29.4 | 9.0 | 750 | 0.25 | 0.5 | 13.0 | 107 |
| Z2SMB18 | 18 | 27.8 | 10 | 750 | 0.25 | 0.5 | 13.7 | 100 |
| Z2SMB19 | 19 | 26.3 | 11 | 750 | 0.25 | 0.5 | 14.4 | 95 |
| Z2SMB20 | 20 | 25.0 | 11 | 750 | 0.25 | 0.5 | 15.2 | 90 |
| Z2SMB22 | 22 | 22.8 | 12 | 750 | 0.25 | 0.5 | 16.7 | 82 |
| Z2SMB24 | 24 | 20.8 | 13 | 750 | 0.25 | 0.5 | 18.2 | 76 |
| Z2SMB27 | 27 | 18.5 | 18 | 750 | 0.25 | 0.5 | 20.6 | 68 |
| Z2SMB30 | 30 | 16.6 | 20 | 1000 | 0.25 | 0.5 | 22.5 | 60 |
| Z2SMB33 | 33 | 15.1 | 23 | 1000 | 0.25 | 0.5 | 25.1 | 55 |
| Z2SMB36 | 36 | 13.9 | 25 | 1000 | 0.25 | 0.5 | 27.4 | 50 |
| Z2SMB39 | 39 | 12.8 | 30 | 1000 | 0.25 | 0.5 | 29.7 | 47 |
| Z2SMB43 | 43 | 11.6 | 35 | 1500 | 0.25 | 0.5 | 32.7 | 43 |
| Z2SMB47 | 47 | 10.6 | 40 | 1500 | 0.25 | 0.5 | 35.8 | 39 |
| Z2SMB51 | 51 | 9.8 | 48 | 1500 | 0.25 | 0.5 | 38.8 | 36 |
| Z2SMB56 | 56 | 9.0 | 55 | 2000 | 0.25 | 0.5 | 42.6 | 32 |
| Z2SMB62 | 62 | 8.1 | 60 | 2000 | 0.25 | 0.5 | 47.1 | 29 |
| Z2SMB68 | 68 | 7.4 | 75 | 2000 | 0.25 | 0.5 | 51.7 | 27 |
| Z2SMB75 | 75 | 6.7 | 90 | 2000 | 0.25 | 0.5 | 56.0 | 24 |
| Z2SMB82 | 82 | 6.1 | 100 | 3000 | 0.25 | 0.5 | 62.2 | 22 |
| Z2SMB91 | 91 | 5.5 | 125 | 3000 | 0.25 | 0.5 | 69.2 | 20 |
| Z2SMB100 | 100 | 5.0 | 175 | 3000 | 0.25 | 0.5 | 76.0 | 18 |
| Z2SMB110 | 110 | 4.5 | 250 | 4000 | 0.25 | 0.5 | 83.6 | 17 |
| Z2SMB120 | 120 | 4.2 | 325 | 4500 | 0.25 | 0.5 | 91.2 | 15 |
| Z2SMB130 | 130 | 3.8 | 400 | 5000 | 0.25 | 0.5 | 98.8 | 14 |
| Z2SMB140 | 140 | 3.6 | 500 | 5500 | 0.25 | 0.5 | 106.4 | 13 |
| Z2SMB150 | 150 | 3.3 | 575 | 6000 | 0.25 | 0.5 | 114.0 | 12 |
| Z2SMB160 | 160 | 3.1 | 650 | 6500 | 0.25 | 0.5 | 121.6 | 11 |
| Z2SMB170 | 170 | 2.9 | 675 | 7000 | 0.25 | 0.5 | 130.4 | 11 |
| Z2SMB180 | 180 | 2.8 | 725 | 7000 | 0.25 | 0.5 | 136.8 | 10 |
| Z2SMB190 | 190 | 2.6 | 825 | 8000 | 0.25 | 0.5 | 144.8 | 10 |
| Z2SMB200 | 200 | 2.5 | 900 | 8000 | 0.25 | 0.5 | 152.0 | 9.0 |