

SMA SURFACE MOUNT ZENER DIODES

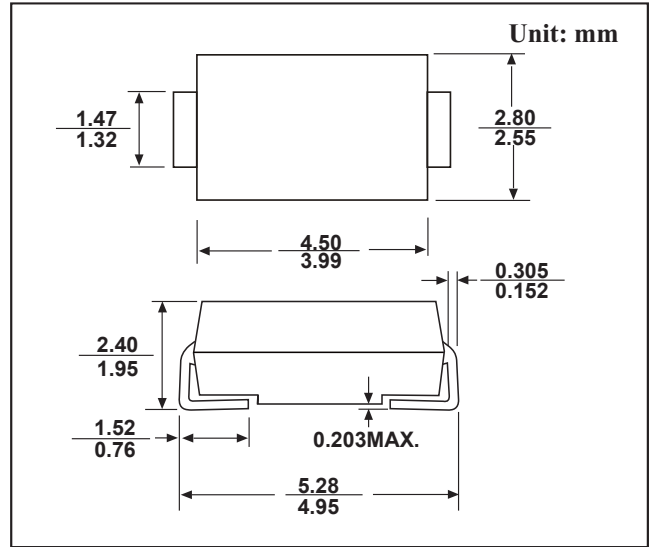
ZENER VOLTAGE RANGE: 2.7 --- 330V PEAK PULSE POWER:2000mW

FEATURES

- Low Reverse Leakage
- Low Zener Impedance
- High Stability and High Reliability

MECHANICAL DATA

- Case: SMA
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| Parameters | SYMBOLS | VALUE | UNITS |
|--|---------|----------|-------|
| Power Dissipation@TL=75°C | Pt | 2.0 | W |
| Forward voltage@IF = 200 mA | VF | 1.2 | V |
| Thermal resistance junction ambient(Note 1) | Rθ (ja) | 25 | °C/W |
| Junction Temperature and Storage Temperature Range | TJ,TSTG | -55~+175 | °C |

Note:1.Valid provided that leads at a distance of 9.5mm from case are kept at ambient temperature

Electrical Specification (TA=25°C unless otherwise specified)

| Type No. | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current |
|----------|-----------------------|-------------|-------------------------|----------------|-------------|---------------------------------|-----------|--------------------------|
| | VZ@IZT (V) | IZT (mA) | ZZT@IZT (Ω) | ZZK@IZK (Ω) | IZK (mA) | IR@ VR (uA) | VR (V) | |
| SZ452H | 2.7 | 80 | 10 | 400 | 1.0 | 100 | 1.0 | 660 |
| SZ453A | 3.0 | 160 | 8.0 | 400 | 1.0 | 100 | 1.0 | 600 |
| SZ453D | 3.3 | 145 | 8.0 | 400 | 1.0 | 80 | 1.0 | 545 |
| SZ453G | 3.6 | 139 | 5.0 | 400 | 1.0 | 80 | 1.0 | 504 |
| SZ453J | 3.9 | 128 | 5.0 | 400 | 1.0 | 30 | 1.0 | 468 |
| SZ454D | 4.3 | 116 | 4.5 | 400 | 1.0 | 20 | 1.0 | 434 |
| SZ454H | 4.7 | 106 | 4.5 | 550 | 1.0 | 5.0 | 1.0 | 386 |
| SZ455B | 5.1 | 98.0 | 3.5 | 600 | 1.0 | 5.0 | 1.0 | 356 |
| SZ455G | 5.6 | 89.5 | 2.5 | 500 | 1.0 | 5.0 | 2.0 | 324 |
| SZ456C | 6.2 | 80.5 | 1.5 | 700 | 1.0 | 5.0 | 3.0 | 292 |
| SZ456I | 6.8 | 73.5 | 2.0 | 700 | 1.0 | 50 | 4.0 | 266 |
| SZ457F | 7.5 | 66.5 | 2.0 | 700 | 0.5 | 50 | 5.0 | 242 |
| SZ458C | 8.2 | 61.0 | 2.3 | 700 | 0.5 | 50 | 6.0 | 220 |
| SZ459B | 9.1 | 55.0 | 2.5 | 700 | 0.5 | 50 | 7.0 | 200 |
| SZ4510 | 10 | 50.0 | 3.5 | 700 | 0.25 | 50 | 7.6 | 182 |
| SZ4511 | 11 | 45.5 | 4.0 | 700 | 0.25 | 50 | 8.4 | 166 |
| SZ4512 | 12 | 41.5 | 4.5 | 700 | 0.25 | 50 | 9.1 | 152 |
| SZ4513 | 13 | 38.5 | 5.0 | 700 | 0.25 | 0.5 | 9.9 | 138 |

Electrical Specification (T_A=25°C unless otherwise specified)

| | | | | | | | | |
|--------|-----|------|------|------|------|-----|-------|-----|
| SZ4514 | 14 | 35.7 | 5.5 | 700 | 0.25 | 0.5 | 10.6 | 130 |
| SZ4515 | 15 | 33.4 | 7.0 | 700 | 0.25 | 0.5 | 11.4 | 122 |
| SZ4516 | 16 | 31.2 | 8.0 | 700 | 0.25 | 0.5 | 12.2 | 114 |
| SZ4517 | 17 | 29.4 | 9.0 | 750 | 0.25 | 0.5 | 13.0 | 107 |
| SZ4518 | 18 | 27.8 | 10 | 750 | 0.25 | 0.5 | 13.7 | 100 |
| SZ4519 | 19 | 26.3 | 11 | 750 | 0.25 | 0.5 | 14.4 | 95 |
| SZ4520 | 20 | 25.0 | 11 | 750 | 0.25 | 0.5 | 15.2 | 90 |
| SZ4522 | 22 | 22.8 | 12 | 750 | 0.25 | 0.5 | 16.7 | 82 |
| SZ4524 | 24 | 20.8 | 13 | 750 | 0.25 | 0.5 | 18.2 | 76 |
| SZ4527 | 27 | 18.5 | 18 | 750 | 0.25 | 0.5 | 20.6 | 68 |
| SZ4530 | 30 | 16.6 | 20 | 1000 | 0.25 | 0.5 | 22.5 | 60 |
| SZ4533 | 33 | 15.1 | 23 | 1000 | 0.25 | 0.5 | 25.1 | 55 |
| SZ4536 | 36 | 13.9 | 25 | 1000 | 0.25 | 0.5 | 27.4 | 50 |
| SZ4539 | 39 | 12.8 | 30 | 1000 | 0.25 | 0.5 | 29.7 | 47 |
| SZ4543 | 43 | 11.6 | 35 | 1500 | 0.25 | 0.5 | 32.7 | 43 |
| SZ4547 | 47 | 10.6 | 40 | 1500 | 0.25 | 0.5 | 35.8 | 39 |
| SZ4551 | 51 | 9.8 | 48 | 1500 | 0.25 | 0.5 | 38.8 | 36 |
| SZ4556 | 56 | 9.0 | 55 | 2000 | 0.25 | 0.5 | 42.6 | 32 |
| SZ4562 | 62 | 8.1 | 60 | 2000 | 0.25 | 0.5 | 47.1 | 29 |
| SZ4568 | 68 | 7.4 | 75 | 2000 | 0.25 | 0.5 | 51.7 | 27 |
| SZ4575 | 75 | 6.7 | 90 | 2000 | 0.25 | 0.5 | 56.0 | 24 |
| SZ4582 | 82 | 6.1 | 100 | 3000 | 0.25 | 0.5 | 62.2 | 22 |
| SZ4591 | 91 | 5.5 | 125 | 3000 | 0.25 | 0.5 | 69.2 | 20 |
| SZ45B0 | 100 | 5.0 | 175 | 3000 | 0.25 | 0.5 | 76.0 | 18 |
| SZ45B1 | 110 | 4.5 | 250 | 4000 | 0.25 | 0.5 | 83.6 | 17 |
| SZ45B2 | 120 | 4.2 | 325 | 4500 | 0.25 | 0.5 | 91.2 | 15 |
| SZ45B3 | 130 | 3.8 | 400 | 5000 | 0.25 | 0.5 | 98.8 | 14 |
| SZ45B4 | 140 | 3.6 | 500 | 5500 | 0.25 | 0.5 | 106.4 | 13 |
| SZ45B5 | 150 | 3.3 | 575 | 6000 | 0.25 | 0.5 | 114.0 | 12 |
| SZ45B6 | 160 | 3.1 | 650 | 6500 | 0.25 | 0.5 | 121.6 | 11 |
| SZ45B7 | 170 | 2.9 | 675 | 7000 | 0.25 | 0.5 | 130.4 | 11 |
| SZ45B8 | 180 | 2.8 | 725 | 7000 | 0.25 | 0.5 | 136.8 | 10 |
| SZ45B9 | 190 | 2.6 | 825 | 8000 | 0.25 | 0.5 | 144.8 | 10 |
| SZ45D0 | 200 | 2.5 | 900 | 8000 | 0.25 | 0.5 | 152.0 | 9.0 |
| SZ45D2 | 220 | 2.0 | 2000 | 8500 | 0.25 | 0.5 | 167 | 8.0 |
| SZ45D7 | 270 | 1.6 | 2200 | 8500 | 0.25 | 0.5 | 205 | 6.7 |
| SZ45E0 | 300 | 1.5 | 2200 | 9000 | 0.25 | 0.5 | 228 | 5.9 |
| SZ45E3 | 330 | 1.4 | 2300 | 9000 | 0.25 | 0.5 | 250 | 5.4 |