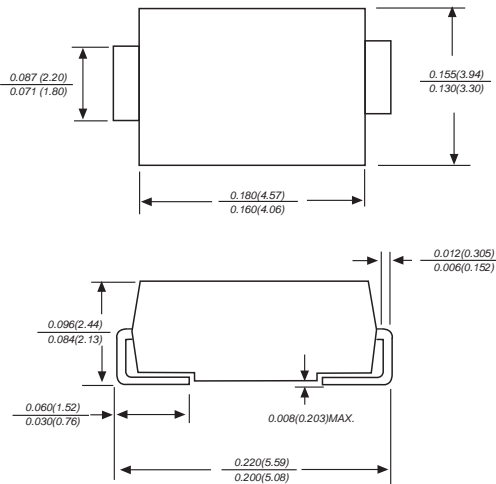


SMBJ5333A to SMBJ5388A

Zener Diodes 5W

DO-214AA



Dimensions in inches and (millimeters)

FEATURE

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Excellent clamping capability
- ◆ Low incremental surge resistance
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: Solder plated, solderable per MIL-STD 750, method 2026
Polarity: Color band denotes cathode except for bidirectional types
Mounting Position: Any

ELECTRICAL CHARACTERISTICS (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Type No. | Nominal Zener Voltage | Test Current | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | | Maximum DC Zener Current |
|------------|---------------------------------|-----------------|-------------------------|---------------------|-----------------|-------------------------------------|------------|-----------------|--------------------------|
| | V _Z @I _{ZT} | I _{ZT} | ZZT@I _{ZT} | ZZK@I _{ZK} | I _{ZK} | I _R @ V _R (V) | | I _{ZM} | |
| Axial Lead | (V) | (mA) | (Ω) | (Ω) | (mA) | (μ A) | Suffix "A" | Suffix "B" | (mA) |
| SMBJ5333A | 3.3 | 380 | 3.0 | 400 | 1.0 | 300 | 1.0 | 1.0 | 1440 |
| SMBJ5334A | 3.6 | 350 | 2.5 | 500 | 1.0 | 150 | 1.0 | 1.0 | 1320 |
| SMBJ5335A | 3.9 | 320 | 2.0 | 500 | 1.0 | 50 | 1.0 | 1.0 | 1220 |
| SMBJ5336A | 4.3 | 290 | 2.0 | 500 | 1.0 | 10 | 1.0 | 1.0 | 1100 |
| SMBJ5337A | 4.7 | 260 | 2.0 | 450 | 1.0 | 5.0 | 1.0 | 1.0 | 1010 |
| SMBJ5338A | 5.1 | 240 | 1.5 | 400 | 1.0 | 1.0 | 1.0 | 1.0 | 930 |
| SMBJ5339A | 5.6 | 220 | 1.0 | 400 | 1.0 | 1.0 | 2.0 | 2.0 | 856 |
| SMBJ5340A | 6.0 | 200 | 1.0 | 300 | 1.0 | 1.0 | 3.0 | 3.0 | 790 |
| SMBJ5341A | 6.2 | 200 | 1.0 | 200 | 1.0 | 1.0 | 4.0 | 3.0 | 765 |
| SMBJ5342A | 6.8 | 175 | 1.0 | 200 | 1.0 | 150 | 4.9 | 5.2 | 700 |
| SMBJ5343A | 7.5 | 175 | 1.5 | 200 | 1.0 | 150 | 5.4 | 5.7 | 630 |
| SMBJ5344A | 8.2 | 150 | 1.5 | 200 | 1.0 | 150 | 5.9 | 6.2 | 580 |
| SMBJ5345A | 8.7 | 150 | 2.0 | 200 | 1.0 | 150 | 6.25 | 6.6 | 545 |
| SMBJ5346A | 9.1 | 150 | 2.0 | 150 | 1.0 | 150 | 6.6 | 6.9 | 520 |
| SMBJ5347A | 10 | 125 | 2.0 | 125 | 1.0 | 150 | 7.2 | 7.6 | 475 |
| SMBJ5348A | 11 | 125 | 2.5 | 125 | 1.0 | 150 | 8.0 | 8.4 | 430 |
| SMBJ5349A | 12 | 100 | 2.5 | 125 | 1.0 | 2.0 | 8.6 | 9.1 | 395 |
| SMBJ5350A | 13 | 100 | 2.5 | 100 | 1.0 | 1.0 | 9.4 | 9.9 | 365 |
| SMBJ5351A | 14 | 100 | 2.5 | 75 | 1.0 | 1.0 | 10.1 | 10.6 | 340 |
| SMBJ5352A | 15 | 75 | 2.5 | 75 | 1.0 | 1.0 | 10.8 | 11.5 | 315 |
| SMBJ5353A | 16 | 75 | 2.5 | 75 | 1.0 | 1.0 | 11.5 | 12.2 | 295 |
| SMBJ5354A | 17 | 70 | 2.5 | 75 | 1.0 | 0.5 | 12.2 | 12.9 | 280 |
| SMBJ5355A | 18 | 65 | 2.5 | 75 | 1.0 | 0.5 | 13.0 | 13.7 | 265 |
| SMBJ5356A | 19 | 65 | 8.0 | 75 | 1.0 | 0.5 | 13.7 | 14.4 | 250 |
| SMBJ5357A | 20 | 65 | 3.0 | 75 | 1.0 | 0.5 | 14.4 | 15.2 | 237 |
| SMBJ5358A | 22 | 50 | 3.5 | 75 | 1.0 | 0.5 | 15.8 | 16.7 | 216 |
| SMBJ5359A | 24 | 50 | 3.5 | 100 | 1.0 | 0.5 | 17.3 | 18.2 | 198 |
| SMBJ5360A | 25 | 50 | 4.0 | 110 | 1.0 | 0.5 | 18.0 | 19.0 | 190 |
| SMBJ5361A | 27 | 50 | 5.0 | 120 | 1.0 | 0.5 | 19.4 | 20.6 | 176 |
| SMBJ5362A | 28 | 50 | 6.0 | 130 | 1.0 | 0.5 | 20.1 | 21.2 | 170 |
| SMBJ5363A | 30 | 40 | 8.0 | 140 | 1.0 | 0.5 | 21.6 | 22.8 | 158 |
| SMBJ5364A | 33 | 40 | 10 | 150 | 1.0 | 0.5 | 23.8 | 25.1 | 144 |
| SMBJ5365A | 36 | 30 | 11 | 160 | 1.0 | 0.5 | 25.9 | 27.4 | 132 |
| SMBJ5366A | 39 | 30 | 14 | 170 | 1.0 | 0.5 | 28.1 | 29.7 | 122 |
| SMBJ5367A | 43 | 30 | 20 | 190 | 1.0 | 0.5 | 31.0 | 32.7 | 110 |
| SMBJ5368A | 47 | 25 | 25 | 210 | 1.0 | 0.5 | 33.8 | 35.8 | 100 |
| SMBJ5369A | 51 | 25 | 27 | 230 | 1.0 | 0.5 | 36.7 | 38.8 | 93.0 |
| SMBJ5370A | 56 | 20 | 35 | 280 | 1.0 | 0.5 | 40.3 | 42.6 | 86.0 |
| SMBJ5371A | 60 | 20 | 40 | 350 | 1.0 | 0.5 | 43.0 | 45.5 | 79.0 |

ELECTRICAL CHARACTERISTICS (at T_A=25°C unless otherwise noted)

| | | | | | | | | | |
|-----------|-----|-----|-----|------|-----|-----|------|------|------|
| SMBJ5372A | 62 | 20 | 42 | 400 | 1.0 | 0.5 | 44.6 | 47.1 | 76.0 |
| SMBJ5373A | 68 | 20 | 44 | 500 | 1.0 | 0.5 | 49.0 | 51.7 | 70.0 |
| SMBJ5374A | 75 | 20 | 45 | 620 | 1.0 | 0.5 | 54.0 | 56.0 | 63.0 |
| SMBJ5375A | 82 | 15 | 65 | 720 | 1.0 | 0.5 | 59.0 | 62.2 | 58.0 |
| SMBJ5376A | 87 | 15 | 75 | 760 | 1.0 | 0.5 | 63.0 | 66.0 | 54.5 |
| SMBJ5377A | 91 | 15 | 75 | 760 | 1.0 | 0.5 | 65.5 | 69.2 | 52.5 |
| SMBJ5378A | 100 | 12 | 90 | 800 | 1.0 | 0.5 | 72.0 | 76.0 | 47.5 |
| SMBJ5379A | 110 | 12 | 125 | 1000 | 1.0 | 0.5 | 79.2 | 83.6 | 43.0 |
| SMBJ5380A | 120 | 10 | 170 | 1150 | 1.0 | 0.5 | 86.4 | 91.2 | 39.5 |
| SMBJ5381A | 130 | 10 | 190 | 1250 | 1.0 | 0.5 | 93.2 | 98.8 | 36.6 |
| SMBJ5382A | 140 | 8.0 | 230 | 1500 | 1.0 | 0.5 | 101 | 106 | 34.0 |
| SMBJ5383A | 150 | 8.0 | 330 | 1500 | 1.0 | 0.5 | 108 | 114 | 31.6 |
| SMBJ5384A | 160 | 8.0 | 350 | 1650 | 1.0 | 0.5 | 115 | 122 | 29.4 |
| SMBJ5385A | 170 | 8.0 | 380 | 1750 | 1.0 | 0.5 | 122 | 129 | 28.0 |
| SMBJ5386A | 180 | 5.0 | 430 | 1750 | 1.0 | 0.5 | 130 | 137 | 26.4 |
| SMBJ5387A | 190 | 5.0 | 450 | 1850 | 1.0 | 0.5 | 137 | 144 | 25.0 |
| SMBJ5388A | 200 | 5.0 | 480 | 1850 | 1.0 | 0.5 | 144 | 152 | 23.6 |