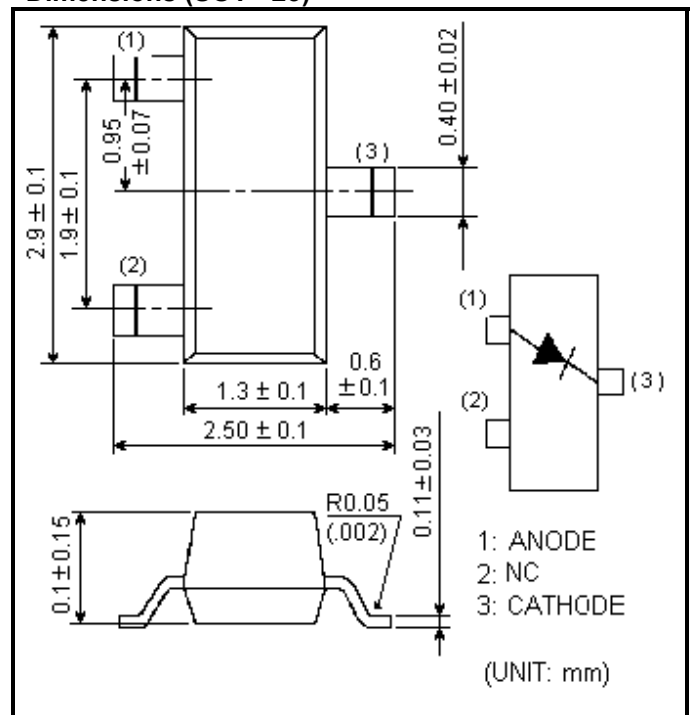


5% SOT-23 SURFACE MOUNT ZENER DIODE

Absolute Maximum Ratings (Ta=25°C)

| Items | Symbol | Ratings | Unit |
|---------------------------------|--------|------------|------|
| Power Dissipation | P | 300 | mW |
| Tolerance | | 5 | % |
| Voltage Range | Vz | 2.4 - 43 | V |
| Forward Voltage @ If = 10 mA | Vf | 0.9 | V |
| Rep. Peak Fwd. Current | IFRM | 250 | mA |
| Junction Temp. | Tj | -55 to 125 | °C |
| Storage Temp. | Tstg | -55 to 150 | °C |

Dimensions (SOT - 23)



Mechanical Data

| Items | Materials |
|-------------|----------------|
| Package | SOT-23 |
| Lead Frame | 42 Alloy |
| Lead Finish | Solder Plating |
| Bond Wire | Au |
| Mold Resin | Epoxy |
| Chip | Silicon |

Electrical Characteristics (Ta=25°C)

| Type No. CMBZ | Zener Voltage Vz @ Izt (V) | Test Curr. Izt (mA) | Max Zener Impedance | | Max Reverse Leakage | | Temp COEFF dvz (%/°C) |
|------------------|-------------------------------------|------------------------------|------------------------|------------------------|------------------------|-----------|-----------------------------|
| | | | Rz @ Izt (Ω) | Rz @ Izt=0.25mA (Ω) | IR (μA) | VR (V) | |
| 5221B | 2.4 | 20 | 30 | 1200 | 100 | 1.0 | -0.085 |
| 5222B | 2.5 | 20 | 30 | 1250 | 100 | 1.0 | -0.085 |
| 5223B | 2.7 | 20 | 30 | 1300 | 75 | 1.0 | -0.080 |
| 5224B | 2.8 | 20 | 30 | 1400 | 75 | 1.0 | -0.080 |
| 5225B | 3.0 | 20 | 29 | 1600 | 50 | 1.0 | -0.075 |
| 5226B | 3.3 | 20 | 28 | 1600 | 25 | 1.0 | -0.070 |
| 5227B | 3.6 | 20 | 24 | 1700 | 15 | 1.0 | -0.65 |
| 5228B | 3.9 | 20 | 23 | 1900 | 10 | 1.0 | -0.060 |
| 5229B | 4.3 | 20 | 22 | 2000 | 5 | 1.0 | +/- 0.055 |
| 5230B | 4.7 | 20 | 19 | 1900 | 5 | 2.0 | +/- 0.030 |
| 5231B | 5.1 | 20 | 17 | 1600 | 5 | 2.0 | +/- 0.030 |
| 5232B | 5.6 | 20 | 11 | 1600 | 5 | 3.0 | +/- 0.038 |

CMBZ52 series

| Type No. CMBZ | Zener Voltage Vz @ Izt (V) | Test Curr. Izt (mA) | Max Zener Impedance | | Max Reverse Leakage | | Temp COEFF dvz (%/°C) |
|------------------|-------------------------------------|------------------------------|------------------------|------------------------|------------------------|-----------|-----------------------------|
| | | | Rz @ Izt (Ω) | Rz @ Izt=0.25mA (Ω) | IR (μA) | VR (V) | |
| 5233B | 6.0 | 20 | 7 | 1600 | 5 | 3.5 | +/- 0.038 |
| 5234B | 6.2 | 20 | 7 | 1000 | 5 | 4.0 | + 0.045 |
| 5235B | 6.8 | 20 | 5 | 750 | 3 | 5.6 | + 0.050 |
| 5236B | 7.5 | 20 | 6 | 500 | 3.0 | 6.0 | + 0.058 |
| 5237B | 8.2 | 20 | 8 | 500 | 3.0 | 6.5 | + 0.062 |
| 5238B | 8.7 | 20 | 8 | 600 | 3.0 | 6.5 | + 0.065 |
| 5239B | 9.1 | 20 | 10 | 600 | 3.0 | 7.0 | + 0.068 |
| 5240B | 10 | 20 | 17 | 600 | 3.0 | 8.0 | + 0.075 |
| 5241B | 11 | 20 | 22 | 600 | 2.0 | 8.4 | + 0.076 |
| 5242B | 12 | 20 | 30 | 600 | 1.0 | 9.1 | + 0.077 |
| 5243B | 13 | 9.5 | 13 | 600 | 0.5 | 9.9 | + 0.079 |
| 5244B | 14 | 9.0 | 15 | 600 | 0.1 | 10 | + 0.082 |
| 5245B | 15 | 8.5 | 16 | 600 | 0.1 | 11 | + 0.082 |
| 5246B | 16 | 7.8 | 17 | 600 | 0.1 | 12 | + 0.083 |
| 5247B | 17 | 7.4 | 19 | 600 | 0.1 | 13 | + 0.084 |
| 5248B | 18 | 7.0 | 21 | 600 | 0.1 | 14 | + 0.085 |
| 5249B | 19 | 6.6 | 23 | 600 | 0.1 | 14 | + 0.086 |
| 5250B | 20 | 6.2 | 25 | 600 | 0.1 | 15 | + 0.087 |
| 5251B | 22 | 5.6 | 29 | 600 | 0.1 | 17 | + 0.088 |
| 5252B | 24 | 5.2 | 33 | 600 | 0.1 | 18 | + 0.089 |
| 5253B | 25 | 5.0 | 35 | 600 | 0.1 | 19 | + 0.090 |
| 5254B | 27 | 4.6 | 41 | 600 | 0.1 | 21 | + 0.091 |
| 5255B | 28 | 4.5 | 44 | 600 | 0.1 | 21 | + 0.091 |
| 5256B | 30 | 4.2 | 49 | 600 | 0.1 | 23 | + 0.092 |
| 5257B | 33 | 3.8 | 58 | 700 | 0.1 | 25 | + 0.093 |
| 5258B | 36 | 3.4 | 70 | 700 | 0.1 | 27 | + 0.094 |
| 5259B | 39 | 3.2 | 80 | 800 | 0.1 | 30 | + 0.095 |
| 5260B | 43 | 3.0 | 93 | 900 | 0.1 | 33 | + 0.095 |