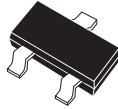


**CMPZ5221B
THRU
CMPZ5261B**

**350 mW ZENER DIODE
5% TOLERANCE**



SOT-23 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPZ5221B Series Silicon Zener Diode is a high quality voltage regulator for use in industrial, commercial, entertainment and computer applications. Higher voltage devices are available on special order.

ABSOLUTE MAXIMUM RATINGS

Power Dissipation (@ $T_A=25^\circ\text{C}$)
Operating and Storage Temperature

SYMBOL

P_D 350
 T_J, T_{stg} -65 to + 175

UNITS

mW
 $^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$), $V_F=0.9\text{V MAX @ } I_F = 10\text{mA}$ FOR ALL TYPES.

| TYPE | ZENER VOLTAGE | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAX. TEMP. COEFF. | MARKING CODE |
|-----------|----------------|-----------|-----------|--------------|-------------------------|-------------------|-------------------|-------------------------|----------|-------------------|--------------|
| | $V_Z @ I_{ZT}$ | | | | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | $I_R @ V_R$ | | | |
| | MIN VOLTS | NOM VOLTS | MAX VOLTS | mA | | | | Ω | Ω | μA | |
| CMPZ5221B | 2.280 | 2.4 | 2.520 | 20 | 30 | 1200 | 0.25 | 100 | 1.0 | -0.085 | 18A |
| CMPZ5222B | 2.375 | 2.5 | 2.625 | 20 | 30 | 1250 | 0.25 | 100 | 1.0 | -0.085 | 18B |
| CMPZ5223B | 2.565 | 2.7 | 2.835 | 20 | 30 | 1300 | 0.25 | 75 | 1.0 | -0.080 | 18C |
| CMPZ5224B | 2.660 | 2.8 | 2.940 | 20 | 30 | 1400 | 0.25 | 75 | 1.0 | -0.080 | 18D |
| CMPZ5225B | 2.850 | 3.0 | 3.150 | 20 | 29 | 1600 | 0.25 | 50 | 1.0 | -0.075 | 18E |
| CMPZ5226B | 3.135 | 3.3 | 3.465 | 20 | 28 | 1600 | 0.25 | 25 | 1.0 | -0.070 | C8A |
| CMPZ5227B | 3.420 | 3.6 | 3.780 | 20 | 24 | 1700 | 0.25 | 15 | 1.0 | -0.065 | C8B |
| CMPZ5228B | 3.705 | 3.9 | 4.095 | 20 | 23 | 1900 | 0.25 | 10 | 1.0 | -0.060 | C8C |
| CMPZ5229B | 4.085 | 4.3 | 4.515 | 20 | 22 | 2000 | 0.25 | 5.0 | 1.0 | ± 0.055 | C8D |
| CMPZ5230B | 4.465 | 4.7 | 4.935 | 20 | 19 | 1900 | 0.25 | 5.0 | 2.0 | ± 0.030 | C8E |
| CMPZ5231B | 4.845 | 5.1 | 5.355 | 20 | 17 | 1600 | 0.25 | 5.0 | 2.0 | ± 0.030 | C8F |
| CMPZ5232B | 5.320 | 5.6 | 5.880 | 20 | 11 | 1600 | 0.25 | 5.0 | 3.0 | +0.038 | C8G |
| CMPZ5233B | 5.700 | 6.0 | 6.300 | 20 | 7.0 | 1600 | 0.25 | 5.0 | 3.5 | +0.038 | C8H |
| CMPZ5234B | 5.890 | 6.2 | 6.510 | 20 | 7.0 | 1000 | 0.25 | 5.0 | 4.0 | +0.045 | C8J |
| CMPZ5235B | 6.460 | 6.8 | 7.140 | 20 | 5.0 | 750 | 0.25 | 3.0 | 5.0 | +0.050 | C8K |
| CMPZ5236B | 7.125 | 7.5 | 7.875 | 20 | 6.0 | 500 | 0.25 | 3.0 | 6.0 | +0.058 | C8L |
| CMPZ5237B | 7.790 | 8.2 | 8.610 | 20 | 8.0 | 500 | 0.25 | 3.0 | 6.5 | +0.062 | C8M |
| CMPZ5238B | 8.265 | 8.7 | 9.135 | 20 | 8.0 | 600 | 0.25 | 3.0 | 6.5 | +0.065 | C8N |
| CMPZ5239B | 8.645 | 9.1 | 9.555 | 20 | 10 | 600 | 0.25 | 3.0 | 7.0 | +0.068 | C8P |
| CMPZ5240B | 9.500 | 10 | 10.50 | 20 | 17 | 600 | 0.25 | 3.0 | 8.0 | +0.075 | C8Q |
| CMPZ5241B | 10.45 | 11 | 11.55 | 20 | 22 | 600 | 0.25 | 2.0 | 8.4 | +0.076 | C8R |
| CMPZ5242B | 11.40 | 12 | 12.60 | 20 | 30 | 600 | 0.25 | 1.0 | 9.1 | +0.077 | C8S |
| CMPZ5243B | 12.35 | 13 | 13.65 | 9.5 | 13 | 600 | 0.25 | 0.5 | 9.9 | +0.079 | C8T |
| CMPZ5244B | 13.30 | 14 | 14.70 | 9.0 | 15 | 600 | 0.25 | 0.1 | 10 | +0.082 | C8U |

| TYPE | ZENER VOLTAGE | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAX. TEMP. COEFF. | MARKING CODE |
|-----------|----------------|-----------|-----------|--------------|-------------------------|-------------------|----------|-------------------------|---------|-------------------|--------------|
| | $V_Z @ I_{ZT}$ | | | | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | | $I_R @ V_R$ | | | |
| | MIN VOLTS | NOM VOLTS | MAX VOLTS | mA | | Ω | Ω | mA | μA | VOLTS | |
| CMPZ5245B | 14.25 | 15 | 15.75 | 8.5 | 16 | 600 | 0.25 | 0.1 | 11 | +0.082 | C8V |
| CMPZ5246B | 15.20 | 16 | 16.80 | 7.8 | 17 | 600 | 0.25 | 0.1 | 12 | +0.083 | C8W |
| CMPZ5247B | 16.15 | 17 | 17.85 | 7.4 | 19 | 600 | 0.25 | 0.1 | 13 | +0.084 | C8X |
| CMPZ5248B | 17.10 | 18 | 18.90 | 7.0 | 21 | 600 | 0.25 | 0.1 | 14 | +0.085 | C8Y |
| CMPZ5249B | 18.05 | 19 | 19.95 | 6.6 | 23 | 600 | 0.25 | 0.1 | 14 | +0.086 | C8Z |
| CMPZ5250B | 19.00 | 20 | 21.00 | 6.2 | 25 | 600 | 0.25 | 0.1 | 15 | +0.086 | 81A |
| CMPZ5251B | 20.90 | 22 | 23.10 | 5.6 | 29 | 600 | 0.25 | 0.1 | 17 | +0.087 | 81B |
| CMPZ5252B | 22.80 | 24 | 25.20 | 5.2 | 33 | 600 | 0.25 | 0.1 | 18 | +0.088 | 81C |
| CMPZ5253B | 23.75 | 25 | 26.25 | 5.0 | 35 | 600 | 0.25 | 0.1 | 19 | +0.089 | 81D |
| CMPZ5254B | 25.65 | 27 | 28.35 | 4.6 | 41 | 600 | 0.25 | 0.1 | 21 | +0.090 | 81E |
| CMPZ5255B | 26.60 | 28 | 29.40 | 4.5 | 44 | 600 | 0.25 | 0.1 | 21 | +0.091 | 81F |
| CMPZ5256B | 28.50 | 30 | 31.50 | 4.2 | 49 | 600 | 0.25 | 0.1 | 23 | +0.091 | 81G |
| CMPZ5257B | 31.35 | 33 | 34.65 | 3.8 | 58 | 700 | 0.25 | 0.1 | 25 | +0.092 | 81H |
| CMPZ5258B | 34.20 | 36 | 37.80 | 3.4 | 70 | 700 | 0.25 | 0.1 | 27 | +0.093 | 81J |
| CMPZ5259B | 37.05 | 39 | 40.95 | 3.2 | 80 | 800 | 0.25 | 0.1 | 30 | +0.094 | 81K |
| CMPZ5260B | 40.85 | 43 | 45.15 | 3.0 | 93 | 900 | 0.25 | 0.1 | 33 | +0.095 | 81L |
| CMPZ5261B | 44.65 | 47 | 49.35 | 2.7 | 105 | 1000 | 0.25 | 0.1 | 36 | +0.095 | 81M |

All dimensions in inches (mm).

