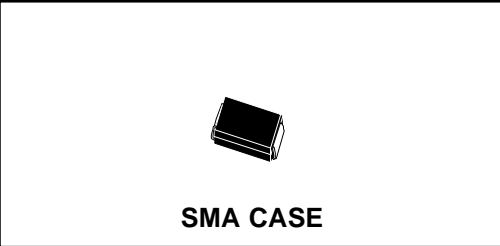


NEW CMZ5921B
THRU
CMZ5956B

**SURFACE MOUNT
SILICON ZENER DIODE
1.5 WATT, 6.8 THRU 200 VOLTS
± 5% TOLERANCE**



FEATURES:

- SUPER MINIATURE CASE
- 200 WATTS OF TVS POWER
- ± 5% TOLERANCE
- SUPERIOR LOT TO LOT CONSISTENCY
- LOW COST
- HIGH RELIABILITY
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1.5 Watt Surface Mount Silicon Zener Diode is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where small size is required. The SMA case occupies 30% less board space than the SMB case. To order devices on 12mm Tape and Reel (5000/13" Reel), add TR13 suffix to part number.

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| | SYMBOL | | UNITS |
|---|----------------|-------------|----------------------|
| Peak Forward Surge Current (8.3ms) | I_{FSM} | 20 | A |
| Power Dissipation ($T_L=75^{\circ}\text{C}$) | P_D | 1.5 | W |
| Power Dissipation | P_D | 0.9 | W |
| Peak Power Dissipation ($T_L<25^{\circ}\text{C}$) PW=10/1000 μs | P_{PK} | 200 | W |
| Peak Power Dissipation ($T_L<25^{\circ}\text{C}$) PW=8/20 μs | P_{PK} | 1000 | W |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | $^{\circ}\text{C}$ |
| Thermal Resistance | θ_{JL} | 50 | $^{\circ}\text{C/W}$ |
| Thermal Resistance | θ_{JA} | 139 | $^{\circ}\text{C/W}$ |

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$), $V_F=1.5\text{V MAX @ } I_F=200\text{mA}$ FOR ALL TYPES.

| TYPE NO. | ZENER VOLTAGE $V_Z @ I_{ZT}$ | | | TEST CURRENT I_{ZT} | MAXIMUM ZENER IMPEDENCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM DC ZENER CURRENT I_{ZM} | MARKING CODE |
|-----------|---------------------------------|-------|-------|--------------------------|-------------------------|-------------------|-------------|-------------------------|-------|--------------------------------------|--------------|
| | MIN | NOM | MAX | | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | $I_R @ V_R$ | | | | |
| | VOLTS | VOLTS | VOLTS | mA | Ω | Ω | mA | μA | VOLTS | mA | |
| CMZ5921B* | 6.460 | 6.8 | 7.140 | 55.1 | 2.5 | 200 | 1.0 | 2.5 | 5.2 | 221 | C5921B |
| CMZ5922B* | 7.125 | 7.5 | 7.875 | 50.0 | 3.0 | 400 | 0.5 | 2.5 | 6.0 | 200 | C5922B |
| CMZ5923B* | 7.790 | 8.2 | 8.610 | 45.7 | 3.5 | 400 | 0.5 | 2.5 | 6.5 | 183 | C5923B |
| CMZ5924B* | 8.645 | 9.1 | 9.555 | 41.2 | 4.0 | 500 | 0.5 | 2.5 | 7.0 | 165 | C5924B |
| CMZ5925B | 9.500 | 10 | 10.50 | 37.5 | 4.5 | 500 | 0.25 | 2.5 | 8.0 | 150 | C5925B |
| CMZ5926B | 10.45 | 11 | 11.55 | 34.1 | 5.5 | 550 | 0.25 | 0.5 | 8.4 | 136 | C5926B |
| CMZ5927B | 11.40 | 12 | 12.60 | 31.2 | 6.5 | 550 | 0.25 | 0.5 | 9.1 | 125 | C5927B |
| CMZ5928B | 12.35 | 13 | 13.65 | 28.8 | 7.0 | 550 | 0.25 | 0.5 | 9.9 | 115 | C5928B |
| CMZ5929B | 14.25 | 15 | 15.75 | 25.0 | 9.0 | 600 | 0.25 | 0.5 | 11.4 | 100 | C5929B |
| CMZ5930B | 15.20 | 16 | 16.80 | 23.4 | 10 | 600 | 0.25 | 0.5 | 12.2 | 94 | C5930B |
| CMZ5931B | 17.10 | 18 | 18.90 | 20.8 | 12 | 650 | 0.25 | 0.5 | 13.7 | 83 | C5931B |
| CMZ5932B | 19.00 | 20 | 21.00 | 18.7 | 14 | 650 | 0.25 | 0.5 | 15.2 | 75 | C5932B |
| CMZ5933B | 20.90 | 22 | 23.10 | 17.0 | 17.5 | 650 | 0.25 | 0.5 | 16.7 | 68 | C5933B |
| CMZ5934B | 22.80 | 24 | 25.20 | 15.6 | 19 | 700 | 0.25 | 0.5 | 18.2 | 63 | C5934B |
| CMZ5935B | 25.65 | 27 | 28.35 | 13.9 | 23 | 700 | 0.25 | 0.5 | 20.6 | 56 | C5935B |
| CMZ5936B | 28.50 | 30 | 31.50 | 12.5 | 26 | 750 | 0.25 | 0.5 | 22.8 | 50 | C5936B |
| CMZ5937B | 31.35 | 33 | 34.65 | 11.4 | 33 | 800 | 0.25 | 0.5 | 25.1 | 45 | C5937B |
| CMZ5938B | 34.20 | 36 | 37.80 | 10.4 | 38 | 850 | 0.25 | 0.5 | 27.4 | 42 | C5938B |
| CMZ5939B | 37.05 | 39 | 40.95 | 9.6 | 45 | 900 | 0.25 | 0.5 | 29.7 | 38 | C5939B |
| CMZ5940B | 40.85 | 43 | 45.15 | 8.7 | 53 | 950 | 0.25 | 0.5 | 32.7 | 35 | C5940B |
| CMZ5941B | 44.65 | 47 | 49.35 | 8.0 | 67 | 1000 | 0.25 | 0.5 | 35.8 | 32 | C5941B |
| CMZ5942B | 48.45 | 51 | 53.55 | 7.3 | 70 | 1100 | 0.25 | 0.5 | 38.8 | 29 | C5942B |
| CMZ5943B | 53.20 | 56 | 58.80 | 6.7 | 86 | 1300 | 0.25 | 0.5 | 42.6 | 27 | C5943B |
| CMZ5944B | 58.90 | 62 | 65.10 | 6.0 | 100 | 1500 | 0.25 | 0.5 | 47.1 | 24 | C5944B |
| CMZ5945B | 64.60 | 68 | 71.40 | 5.5 | 120 | 1700 | 0.25 | 0.5 | 51.7 | 22 | C5945B |
| CMZ5946B | 71.25 | 75 | 78.75 | 5.0 | 140 | 2000 | 0.25 | 0.5 | 56.0 | 20 | C5946B |
| CMZ5947B | 77.90 | 82 | 86.10 | 4.6 | 160 | 2500 | 0.25 | 0.5 | 62.2 | 18 | C5947B |
| CMZ5948B | 86.45 | 91 | 95.55 | 4.1 | 200 | 3000 | 0.25 | 0.5 | 69.2 | 16 | C5948B |
| CMZ5949B | 95.00 | 100 | 105.0 | 3.7 | 250 | 3100 | 0.25 | 0.5 | 76.0 | 15 | C5949B |
| CMZ5950B | 104.5 | 110 | 115.5 | 3.4 | 300 | 4000 | 0.25 | 0.5 | 83.6 | 13 | C5950B |
| CMZ5951B | 114.0 | 120 | 126.0 | 3.1 | 360 | 4500 | 0.25 | 0.5 | 91.2 | 12 | C5951B |
| CMZ5952B | 123.5 | 130 | 136.5 | 2.9 | 450 | 5000 | 0.25 | 0.5 | 98.8 | 11 | C5952B |
| CMZ5953B | 142.5 | 150 | 157.5 | 2.5 | 600 | 6000 | 0.25 | 0.5 | 114.0 | 10 | C5953B |
| CMZ5954B | 152.0 | 160 | 168.0 | 2.3 | 700 | 6500 | 0.25 | 0.5 | 121.6 | 9.0 | C5954B |
| CMZ5955B | 171.0 | 180 | 189.0 | 2.1 | 900 | 7000 | 0.25 | 0.5 | 136.8 | 8.0 | C5955B |
| CMZ5956B | 190.0 | 200 | 210.0 | 1.9 | 1200 | 8000 | 0.25 | 0.5 | 152.0 | 7.0 | C5956B |

* Available on special order; consult factory.

All Dimensions in Inches (mm).

