

CMDZ2L4 THRU CMDZ36L
SUPERmini™
LOW LEVEL ZENER DIODE
250mW, 2.4 VOLTS THRU 36 VOLTS

SUPERmini™

SOD-323 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDZ2L4 Series Silicon Low Level Zener Diode is a high quality voltage regulator, manufactured in a SUPERmini™ surface mount package, designed for applications requiring a low operating current, low leakage, and a sharp knee.

ABSOLUTE MAXIMUM RATINGS:

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

SYMBOL

P_D 250
 T_J, T_{stg} -65 to +150
 θ_{JA} 500

UNIT

mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

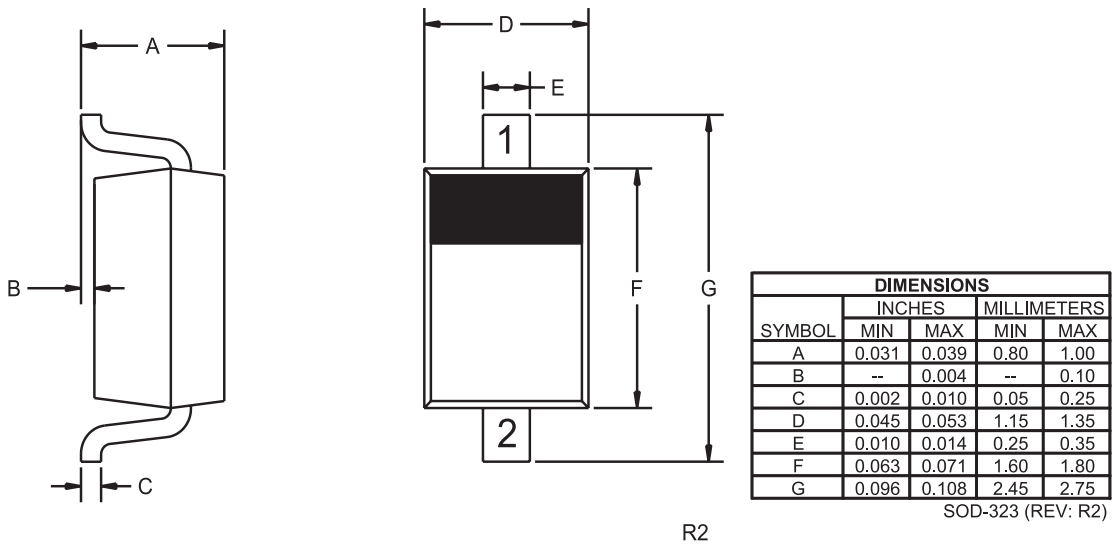
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

| TYPE | ZENER VOLTAGE $V_Z @ I_{ZT}$ | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | MAXIMUM REVERSE CURRENT | | MARKING CODE |
|---------|------------------------------|-------|-------|---------------|-------------------------|-------------------------|-------|--------------|
| | MIN | NOM | MAX | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $I_R @ V_R$ | | |
| | VOLTS | VOLTS | VOLTS | μA | Ω | μA | VOLTS | |
| CMDZ2L4 | 2.280 | 2.4 | 2.520 | 500 | 900 | 25 | 1.0 | AP |
| CMDZ2L5 | 2.375 | 2.5 | 2.625 | 500 | 900 | 10 | 1.0 | BP |
| CMDZ2L7 | 2.565 | 2.7 | 2.835 | 500 | 900 | 10 | 1.0 | CP |
| CMDZ2L8 | 2.660 | 2.8 | 2.940 | 500 | 900 | 10 | 1.0 | DP |
| CMDZ3L0 | 2.850 | 3.0 | 3.150 | 500 | 900 | 5.0 | 1.0 | EP |
| CMDZ3L3 | 3.135 | 3.3 | 3.465 | 500 | 900 | 5.0 | 1.0 | FP |
| CMDZ3L6 | 3.420 | 3.6 | 3.780 | 500 | 900 | 5.0 | 1.0 | GP |
| CMDZ3L9 | 3.705 | 3.9 | 4.095 | 500 | 900 | 5.0 | 1.0 | HP |
| CMDZ4L3 | 4.085 | 4.3 | 4.515 | 500 | 900 | 5.0 | 1.0 | JP |
| CMDZ4L7 | 4.465 | 4.7 | 4.935 | 500 | 750 | 1.0 | 1.5 | KP |
| CMDZ5L1 | 4.84 | 5.1 | 5.37 | 500 | 350 | 1.0 | 1.5 | LP |
| CMDZ5L6 | 5.31 | 5.6 | 5.92 | 500 | 325 | 1.0 | 2.0 | NP |
| CMDZ6L2 | 5.86 | 6.2 | 6.53 | 500 | 90 | 1.0 | 2.0 | OP |
| CMDZ6L8 | 6.47 | 6.8 | 7.14 | 500 | 60 | 1.0 | 3.5 | PP |
| CMDZ7L5 | 7.06 | 7.5 | 7.84 | 500 | 60 | 1.0 | 3.5 | QP |
| CMDZ8L2 | 7.76 | 8.2 | 8.64 | 500 | 60 | 1.0 | 6.0 | RP |
| CMDZ9L1 | 8.56 | 9.1 | 9.55 | 500 | 60 | 1.0 | 6.0 | SP |
| CMDZ10L | 9.45 | 10 | 10.55 | 500 | 80 | 1.0 | 8.0 | TP |
| CMDZ11L | 10.44 | 11 | 11.56 | 500 | 80 | 1.0 | 8.0 | UP |
| CMDZ12L | 11.42 | 12 | 12.60 | 500 | 80 | 1.0 | 10.5 | VP |
| CMDZ13L | 12.47 | 13 | 13.96 | 500 | 80 | 1.0 | 10.5 | XP |
| CMDZ15L | 13.84 | 15 | 15.52 | 500 | 80 | 1.0 | 11.5 | YP |
| CMDZ16L | 15.37 | 16 | 17.09 | 500 | 80 | 1.0 | 14 | ZP |
| CMDZ18L | 16.94 | 18 | 19.03 | 500 | 80 | 1.0 | 16 | 1P |
| CMDZ20L | 18.86 | 20 | 21.08 | 500 | 100 | 1.0 | 18 | 2P |

ELECTRICAL CHARACTERISTICS (CONTINUED):

| TYPE | ZENER VOLTAGE $V_Z @ I_{ZT}$ | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | MAXIMUM REVERSE CURRENT | | MARKING CODE |
|---------|---------------------------------|-------|-------|--------------|-------------------------|-------------------------|-------|--------------|
| | MIN | NOM | MAX | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $I_R @ V_R$ | | |
| | VOLTS | VOLTS | VOLTS | μA | Ω | μA | VOLTS | |
| CMDZ22L | 20.88 | 22 | 23.17 | 500 | 100 | 1.0 | 20 | 3P |
| CMDZ24L | 22.93 | 24 | 25.57 | 500 | 120 | 1.0 | 22 | 4P |
| CMDZ27L | 25.10 | 27 | 28.90 | 500 | 150 | 1.0 | 24 | 5P |
| CMDZ30L | 28.00 | 30 | 32.00 | 500 | 200 | 1.0 | 27 | 6P |
| CMDZ33L | 31.00 | 33 | 35.00 | 500 | 250 | 1.0 | 30 | 7P |
| CMDZ36L | 34.00 | 36 | 38.00 | 500 | 300 | 1.0 | 33 | 8P |

SOD-323 CASE - MECHANICAL OUTLINE



R2

LEAD CODE:

- 1) Cathode
- 2) Anode

R1 (1-November 2001)