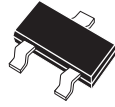


**CMPZDC2V4
THRU
CMPZDC47V**

**DUAL ZENER DIODE
2.4 VOLTS THRU 47 VOLTS
350mW**



SOT-23 CASE

Central™

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPZDC2V4 Series silicon dual zener diode is a highly quality voltage regulator, connected in a common cathode configuration, for use in industrial, commercial, entertainment and computer applications.

MARKING CODE: See Marking Codes on Electrical Characteristics table.

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

Power Dissipation
Operating and Storage Temperature
Thermal Resistance

| SYMBOL | | UNITS |
|----------------|-------------|----------------------|
| P_D | 350 | mW |
| T_J, T_{stg} | -65 TO +150 | $^{\circ}\text{C}$ |
| Θ_{JA} | 357 | $^{\circ}\text{C/W}$ |

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

| TYPE NO. | ZENER VOLTAGE $V_Z @ I_{ZT}$ | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM ZENER CURRENT | MAXIMUM ZENER VOLTAGE TEMP. COEFF. | MARKING CODE |
|------------|---------------------------------|-------|--------------|-------------------------|-------------------|-----|-------------------------|-------|-----------------------|------------------------------------|--------------|
| | MIN | MAX | | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | | $I_R @ V_R$ | | | | |
| | VOLTS | VOLTS | Ω | | Ω | mA | μA | VOLTS | mA | % / $^{\circ}\text{C}$ | |
| CMPZDC2V4* | 2.2 | 2.6 | 5.0 | 100 | 600 | 1.0 | 50 | 1.0 | 63 | -0.06 | CCW3 |
| CMPZDC2V7* | 2.5 | 2.9 | 5.0 | 100 | 600 | 1.0 | 20 | 1.0 | 57 | -0.06 | CCW4 |
| CMPZDC3V0* | 2.8 | 3.2 | 5.0 | 95 | 600 | 1.0 | 10 | 1.0 | 54 | -0.06 | CCW5 |
| CMPZDC3V3* | 3.1 | 3.5 | 5.0 | 95 | 600 | 1.0 | 5.0 | 1.0 | 47 | -0.06 | CCW6 |
| CMPZDC3V6* | 3.4 | 3.8 | 5.0 | 95 | 600 | 1.0 | 2.0 | 1.0 | 45 | -0.06 | CCW7 |
| CMPZDC3V9* | 3.7 | 4.1 | 5.0 | 90 | 600 | 1.0 | 2.0 | 1.0 | 43 | -0.06 | CCW8 |
| CMPZDC4V3* | 4.0 | 4.6 | 5.0 | 90 | 600 | 1.0 | 1.0 | 1.0 | 40 | -0.05 | CCW9 |
| CMPZDC4V7* | 4.4 | 5.0 | 5.0 | 80 | 500 | 1.0 | 3.0 | 2.0 | 38 | -0.03 | CCZ1 |
| CMPZDC5V1* | 4.8 | 5.4 | 5.0 | 60 | 480 | 1.0 | 2.0 | 2.0 | 35 | 0.02 | CCZ2 |
| CMPZDC5V6* | 5.2 | 6.0 | 5.0 | 40 | 400 | 1.0 | 1.0 | 2.0 | 32 | 0.03 | CCZ3 |
| CMPZDC6V2* | 5.8 | 6.6 | 5.0 | 10 | 150 | 1.0 | 3.0 | 4.0 | 28 | 0.04 | CCZ4 |
| CMPZDC6V8* | 6.5 | 7.2 | 5.0 | 15 | 80 | 1.0 | 2.0 | 4.0 | 25 | 0.05 | CCZ5 |
| CMPZDC7V5* | 7.0 | 7.9 | 5.0 | 15 | 80 | 1.0 | 1.0 | 5.0 | 23 | 0.05 | CCZ6 |
| CMPZDC8V2* | 7.7 | 8.7 | 5.0 | 15 | 80 | 1.0 | 0.7 | 5.0 | 21 | 0.06 | CCZ7 |
| CMPZDC9V1* | 8.5 | 9.6 | 5.0 | 15 | 100 | 1.0 | 0.5 | 6.0 | 18 | 0.06 | CCZ8 |
| CMPZDC10V* | 9.4 | 10.6 | 5.0 | 20 | 150 | 1.0 | 0.2 | 7.0 | 16 | 0.07 | CCZ9 |
| CMPZDC11V* | 10.4 | 11.6 | 5.0 | 20 | 150 | 1.0 | 0.1 | 8.0 | 15 | 0.07 | CCY1 |
| CMPZDC12V* | 11.4 | 12.7 | 5.0 | 25 | 150 | 1.0 | 0.1 | 8.0 | 13 | 0.07 | CCY2 |
| CMPZDC13V* | 12.4 | 14.1 | 5.0 | 30 | 170 | 1.0 | 0.1 | 8.0 | 12 | 0.08 | CCY3 |
| CMPZDC15V* | 13.8 | 15.6 | 5.0 | 30 | 200 | 1.0 | 0.05 | 10.5 | 11 | 0.08 | CCY4 |
| CMPZDC16V* | 15.3 | 17.1 | 5.0 | 40 | 200 | 1.0 | 0.05 | 11.2 | 10 | 0.08 | CCY5 |
| CMPZDC18V* | 16.8 | 19.1 | 5.0 | 45 | 225 | 1.0 | 0.05 | 12.6 | 9.2 | 0.08 | CCY6 |
| CMPZDC20V* | 18.8 | 21.2 | 5.0 | 55 | 225 | 1.0 | 0.05 | 14.0 | 8.3 | 0.08 | CCY7 |
| CMPZDC22V* | 20.8 | 23.3 | 5.0 | 55 | 250 | 1.0 | 0.05 | 15.4 | 7.6 | 0.09 | CCY8 |

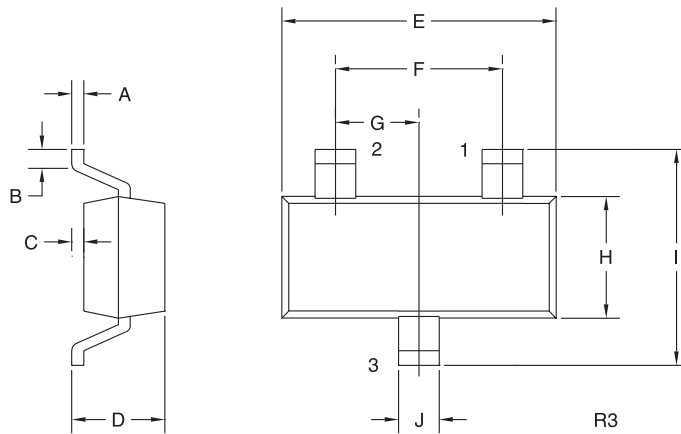
* Available on special order only, consult factory

ELECTRICAL CHARACTERISTICS (Continued)

| TYPE NO. | ZENER VOLTAGE | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM ZENER CURRENT | MAXIMUM ZENER VOLTAGE TEMP. COEFF. | MARKING CODE |
|------------|----------------|-----------|--------------|-------------------------|-------------------|----------|-------------------------|---------|-----------------------|------------------------------------|--------------|
| | $V_Z @ I_{ZT}$ | | | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | | $I_R @ V_R$ | | | | |
| | MIN VOLTS | MAX VOLTS | I_{ZT} mA | | Ω | Ω | mA | μA | VOLTS | I_{ZM} mA | |
| CMPZDC24V* | 22.8 | 25.6 | 5.0 | 70 | 250 | 1.0 | 0.05 | 16.8 | 7.0 | 0.09 | CCY9 |
| CMPZDC27V | 25.1 | 28.9 | 2.0 | 80 | 300 | 0.5 | 0.05 | 18.9 | 6.2 | 0.09 | CC10 |
| CMPZDC30V* | 28.0 | 32.0 | 2.0 | 80 | 300 | 0.5 | 0.05 | 21.0 | 5.6 | 0.09 | CC11 |
| CMPZDC33V* | 31.0 | 35.0 | 2.0 | 80 | 325 | 0.5 | 0.05 | 23.1 | 5.0 | 0.09 | CC12 |
| CMPZDC36V* | 34.0 | 38.0 | 2.0 | 90 | 350 | 0.5 | 0.05 | 25.2 | 4.6 | 0.09 | CC13 |
| CMPZDC39V* | 37.0 | 41.0 | 2.0 | 130 | 350 | 0.5 | 0.05 | 27.3 | 4.3 | 0.09 | CC14 |
| CMPZDC43V* | 40.0 | 46.0 | 2.0 | 150 | 375 | 0.5 | 0.05 | 30.1 | 3.9 | 0.10 | CC15 |
| CMPZDC47V* | 44.0 | 50.0 | 2.0 | 170 | 375 | 0.5 | 0.05 | 32.9 | 3.5 | 0.10 | CC16 |

* Available on special order only, consult factory

SOT-23 CASE - MECHANICAL OUTLINE

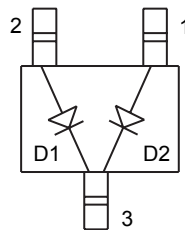


| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.003 | 0.007 | 0.08 | 0.18 |
| B | 0.006 | - | 0.15 | - |
| C | - | 0.005 | - | 0.13 |
| D | 0.035 | 0.043 | 0.89 | 1.09 |
| E | 0.110 | 0.120 | 2.80 | 3.05 |
| F | 0.075 | | 1.90 | |
| G | 0.037 | | 0.95 | |
| H | 0.047 | 0.055 | 1.19 | 1.40 |
| I | 0.083 | 0.098 | 2.10 | 2.49 |
| J | 0.014 | 0.020 | 0.35 | 0.50 |

SOT-23 (REV: R3)

LEAD CODE:

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2



MARKING CODE: See Marking Codes on Electrical Characteristics table.