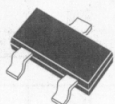




**CMPZDC2V4  
THRU  
CMPZDC47V**

**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:** ( $T_A=25^{\circ}C$ )

Power Dissipation  
Operating and Storage Temperature  
Thermal Resistance

**SYMBOL**

SYMBOL	UNITS
$P_D$	350 mW
$T_J, T_{stg}$	-65 TO +150 °C
$\Theta_{JA}$	357 °C/W

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

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		$\Omega$	$\Omega$	mA	$\mu A$	VOLTS	$I_{ZM}$ mA	
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

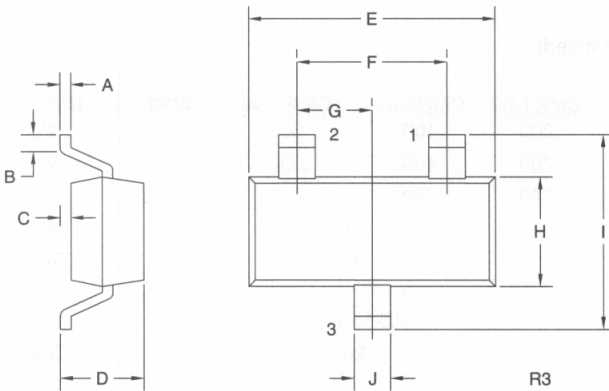
\* Available on special order only, consult factory  
For Typical Electrical Characteristic Data for Zener Voltages 2.4V thru 6.2V and for 6.8V thru 47V, please see Process CPZ18 & CPZ19 on pages 888 & 889, respectively.

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		$\Omega$	$\Omega$	mA	$\mu A$	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



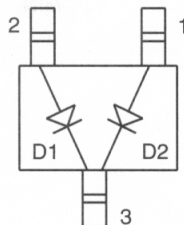
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

DATA SHEETS

LEAD CODE:

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



MARKING CODE: See Marking Codes on Electrical Characteristics table.