

CMPZDC2V4 THRU CMPZDC47V

**SURFACE MOUNT
DUAL, COMMON CATHODE
SILICON ZENER DIODES
2.4 VOLTS THRU 47 VOLTS
350mW**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPZDC2V4 series dual silicon 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



SOT-23 CASE

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

Power Dissipation
Operating and Storage Temperature
Thermal Resistance

SYMBOL

P_D 350
 T_J, T_{stg} -65 TO +175
 θ_{JA} 429

UNITS

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

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^{\circ}\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

TYPE	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}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	I_{ZM}	θV_Z		
	V	V	mA	Ω	Ω	mA	μA	V	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	6.4	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

R2 (10-August 2012)

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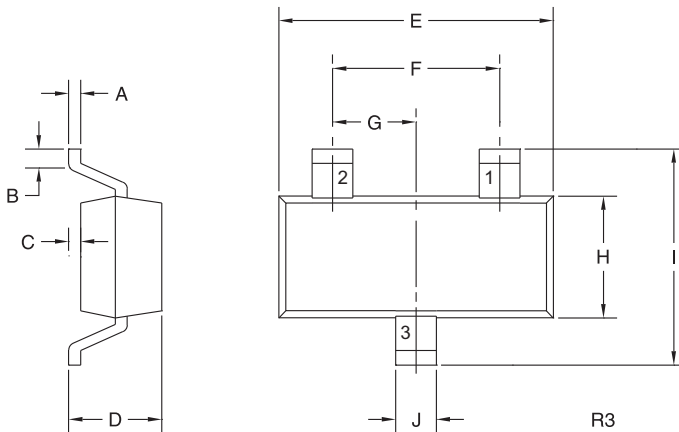
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ELECTRICAL CHARACTERISTICS PER DIODE - Continued: ($T_A=25^\circ\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

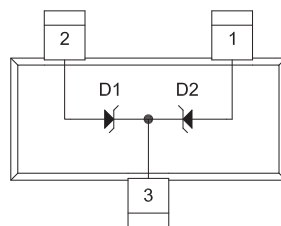
TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT	MAXIMUM ZENER CURRENT	MAXIMUM ZENER VOLTAGE TEMP. COEFF.	MARKING CODE	
	MIN	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	I_{ZM}	$\ominus V_Z$			
	V	V	mA	Ω	Ω mA	μA V	mA	% / $^\circ\text{C}$			
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

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

R2 (10-August 2012)