

CMPZDC2V4 THRU CMPZDC47V

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

**SOT-23 CASE**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**MAXIMUM RATINGS:** ($T_A=25^{\circ}\text{C}$)

Power Dissipation

Operating and Storage Temperature

Thermal Resistance

SYMBOL P_D T_J, T_{stg} θ_{JA}

350

-65 TO +175

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)

CMPZDC2V4 THRU CMPZDC47V

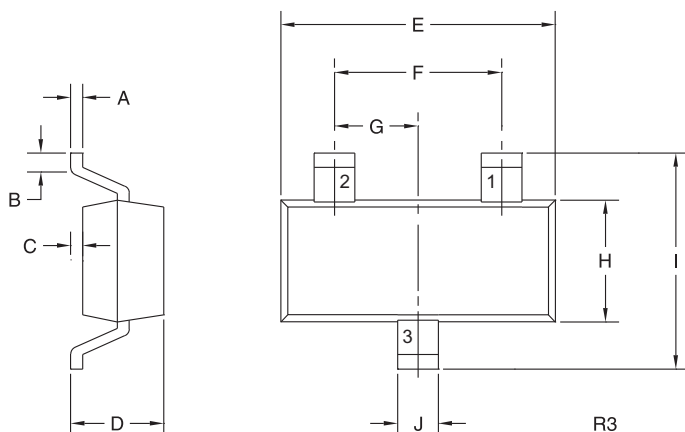
**SURFACE MOUNT
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350mW**



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)

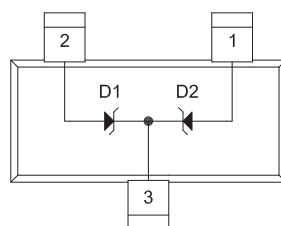
TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT I_{ZM}	MAXIMUM ZENER VOLTAGE TEMP. COEFF. ΘV_Z	MARKING CODE
	MIN	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$				
	V	V		Ω	Ω	mA	μA	V		% / $^{\circ}\text{C}$	
CMPZDC24V	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)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

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Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
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Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms

Product End of Life Notification

PDN ID:	PDN01133
Notification Date:	8/27/19
Last Buy Date:	2/27/20
Last Shipment Date	8/27/20

Summary: The CMPZDC2V4 Series of Zener diodes are discontinued and now as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

Central Part Number	Replacement
CMPZDC10V BK	N/A, Stock Only
CMPZDC10V TR	N/A, Stock Only
CMPZDC11V BK	N/A, Stock Only
CMPZDC11V TR	N/A, Stock Only
CMPZDC12V BK	N/A, Stock Only
CMPZDC12V TR	N/A, Stock Only
CMPZDC13V BK	N/A, Stock Only
CMPZDC13V TR	N/A, Stock Only
CMPZDC15V BK	N/A, Stock Only
CMPZDC15V TR	N/A, Stock Only
CMPZDC16V BK	N/A, Stock Only
CMPZDC16V TR	N/A, Stock Only
CMPZDC18V BK	N/A, Stock Only
CMPZDC18V TR	N/A, Stock Only
CMPZDC2V4 BK	N/A, Stock Only
CMPZDC2V4 TR	N/A, Stock Only
CMPZDC2V7 BK	N/A, Stock Only
CMPZDC2V7 TR	N/A, Stock Only
CMPZDC20V BK	N/A, Stock Only
CMPZDC20V TR	N/A, Stock Only
CMPZDC22V BK	N/A, Stock Only
CMPZDC22V TR	N/A, Stock Only
CMPZDC24V BK	N/A, Stock Only
CMPZDC24V TR	N/A, Stock Only
CMPZDC27V BK	N/A, Stock Only
CMPZDC27V TR	N/A, Stock Only
CMPZDC3V0 BK	N/A, Stock Only
CMPZDC3V0 TR	N/A, Stock Only
CMPZDC3V3 BK	N/A, Stock Only
CMPZDC3V3 TR	N/A, Stock Only
CMPZDC3V6 BK	N/A, Stock Only
CMPZDC3V6 TR	N/A, Stock Only
CMPZDC3V9 BK	N/A, Stock Only
CMPZDC3V9 TR	N/A, Stock Only
CMPZDC30V BK	N/A, Stock Only
CMPZDC30V TR	N/A, Stock Only
CMPZDC33V BK	N/A, Stock Only
CMPZDC33V TR	N/A, Stock Only

*** CONTINUED ***

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

Product End of Life Notification

PDN ID:	PDN01133
Notification Date:	8/27/19
Last Buy Date:	2/27/20
Last Shipment Date	8/27/20

*** CONTINUED FROM PRIOR PAGE ***

Central Part Number	Replacement
CMPZDC36V BK	N/A, Stock Only
CMPZDC36V TR	N/A, Stock Only
CMPZDC39V BK	N/A, Stock Only
CMPZDC39V TR	N/A, Stock Only
CMPZDC4V3 BK	N/A, Stock Only
CMPZDC4V3 TR	N/A, Stock Only
CMPZDC4V7 BK	N/A, Stock Only
CMPZDC4V7 TR	N/A, Stock Only
CMPZDC43V BK	N/A, Stock Only
CMPZDC43V TR	N/A, Stock Only
CMPZDC47V BK	N/A, Stock Only
CMPZDC47V TR	N/A, Stock Only
CMPZDC5V1 BK	N/A, Stock Only
CMPZDC5V1 TR	N/A, Stock Only
CMPZDC5V6 BK	N/A, Stock Only
CMPZDC5V6 TR	N/A, Stock Only
CMPZDC6V2 BK	N/A, Stock Only
CMPZDC6V2 TR	N/A, Stock Only
CMPZDC6V8 BK	N/A, Stock Only
CMPZDC6V8 TR	N/A, Stock Only
CMPZDC7V5 BK	N/A, Stock Only
CMPZDC7V5 TR	N/A, Stock Only
CMPZDC8V2 BK	N/A, Stock Only
CMPZDC8V2 TR	N/A, Stock Only
CMPZDC9V1 BK	N/A, Stock Only
CMPZDC9V1 TR	N/A, Stock Only

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centrasemi.com.

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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

<u>CMPZDC10V TR</u>	<u>CMPZDC11V TR</u>	<u>CMPZDC12V TR</u>	<u>CMPZDC13V TR</u>	<u>CMPZDC15V TR</u>	<u>CMPZDC16V TR</u>
<u>CMPZDC18V TR</u>	<u>CMPZDC2V4 TR</u>	<u>CMPZDC2V7 TR</u>	<u>CMPZDC20V TR</u>	<u>CMPZDC22V TR</u>	<u>CMPZDC24V TR</u>
<u>CMPZDC27V TR</u>	<u>CMPZDC3V0 TR</u>	<u>CMPZDC3V3 TR</u>	<u>CMPZDC3V6 TR</u>	<u>CMPZDC3V9 TR</u>	<u>CMPZDC30V TR</u>
<u>CMPZDC33V TR</u>	<u>CMPZDC36V TR</u>	<u>CMPZDC39V TR</u>	<u>CMPZDC4V3 TR</u>	<u>CMPZDC4V7 TR</u>	<u>CMPZDC43V TR</u>
<u>CMPZDC47V TR</u>	<u>CMPZDC5V1 TR</u>	<u>CMPZDC5V6 TR</u>	<u>CMPZDC6V2 TR</u>	<u>CMPZDC6V8 TR</u>	<u>CMPZDC7V5 TR</u>
<u>CMPZDC8V2 TR</u>	<u>CMPZDC9V1 TR</u>				