

CMOZ2V4C THRU CMOZ43VC

**SURFACE MOUNT
SILICON ZENER DIODE
2.4 VOLTS THRU 43 VOLTS
2% TOLERANCE**

ULTRAmini™**SOD-523 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOZ2V4C Series Zener Diode is a high quality voltage regulator in an epoxy-molded ULTRAmini™ package, designed for applications requiring low leakage.

MARKING CODE: CONSULT FACTORY**MAXIMUM RATINGS:** ($T_A=25^{\circ}\text{C}$ unless otherwise noted)Power Dissipation (Note 1) ($T_A=50^{\circ}\text{C}$)

Power Dissipation (Note 2)

Power Dissipation (Note 3)

Operating and Storage Junction Temperature

Thermal Resistance ($P_D=300\text{mW}$)**SYMBOL** P_D P_D P_D T_J, T_{stg} Θ_{JA}

350

300

250

-65 to +150

417

UNITS

mW

mW

mW

 $^{\circ}\text{C}$ $^{\circ}\text{C/W}$ **ELECTRICAL CHARACTERISTICS:** ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{ MAX @ }I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT	
	MIN V	NOM V	MAX V			I_R @ μA	V_R V
CMOZ2V4C	2.35	2.4	2.45	5.0	100	25	1.0
CMOZ2V6C	2.55	2.6	2.65	5.0	100	25	1.0
CMOZ2V7C	2.65	2.7	2.75	5.0	100	10	1.0
CMOZ3V0C	2.94	3.0	3.06	5.0	95	5.0	1.0
CMOZ3V3C	3.23	3.3	3.37	5.0	95	2.0	1.0
CMOZ3V6C	3.53	3.6	3.67	5.0	90	2.0	1.0
CMOZ3V9C	3.82	3.9	3.98	5.0	90	2.0	1.0
CMOZ4V3C	4.21	4.3	4.39	5.0	90	1.0	1.0
CMOZ4V7C	4.61	4.7	4.79	5.0	80	3.0	2.0
CMOZ5V1C	5.00	5.1	5.20	5.0	60	2.0	2.0
CMOZ5V6C	5.49	5.6	5.71	5.0	40	1.0	2.0
CMOZ6V2C	6.08	6.2	6.32	5.0	10	3.0	4.0
CMOZ6V8C	6.66	6.8	6.94	5.0	15	2.0	4.0
CMOZ7V5C	7.35	7.5	7.65	5.0	15	1.0	5.0
CMOZ8V2C	8.04	8.2	8.36	5.0	15	0.7	5.0
CMOZ9V1C	8.92	9.1	9.28	5.0	15	0.5	6.0
CMOZ10VC	9.80	10	10.20	5.0	20	0.2	7.0

Notes: (1) Ceramic or aluminum core PC Board with copper mounting pad area of 4.0mm^2 (2) FR-4 Epoxy PC Board with copper mounting pad area of 4.0mm^2 (3) FR-4 Epoxy PC Board with copper mounting pad area of 1.4mm^2

R3 (15-April 2011)

CMOZ2V4C THRU CMOZ43VC

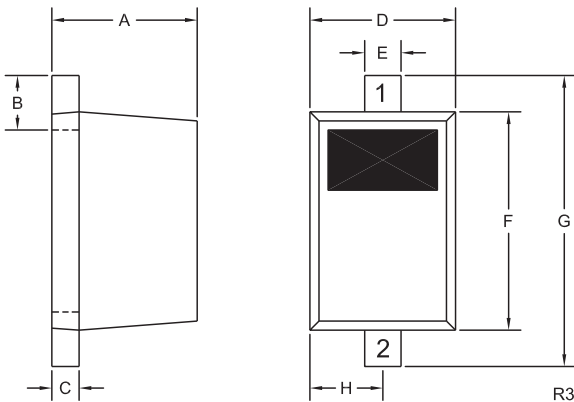
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$), $V_F=0.9$ MAX @ $I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} @ I_{ZT}	MAXIMUM REVERSE CURRENT	
	MIN V	NOM V	MAX V			I_R @ V_R	V_R
CMOZ11VC	10.78	11	11.22	5.0	20	0.1	8.0
CMOZ12VC	11.76	12	12.24	5.0	25	0.1	8.0
CMOZ13VC	12.74	13	13.26	5.0	30	0.1	8.0
CMOZ15VC	14.70	15	15.30	5.0	30	0.05	10.5
CMOZ16VC	15.68	16	16.32	5.0	40	0.05	11.2
CMOZ18VC	17.64	18	18.36	5.0	45	0.05	12.6
CMOZ20VC	19.60	20	20.40	5.0	55	0.05	14.0
CMOZ22VC	21.56	22	22.44	5.0	55	0.05	15.4
CMOZ24VC	23.52	24	24.48	5.0	70	0.05	16.8
CMOZ27VC	26.46	27	27.54	5.0	80	0.05	18.9
CMOZ30VC	29.40	30	30.60	5.0	80	0.05	21.0
CMOZ33VC	32.34	33	33.66	5.0	80	0.05	23.1
CMOZ36VC	35.28	36	36.72	5.0	90	0.05	25.2
CMOZ39VC	38.22	39	39.78	5.0	130	0.05	27.3
CMOZ43VC	42.14	43	43.86	5.0	150	0.05	30.1

SOD-523 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.008	0.016	0.20	0.40
C	0.002	0.008	0.05	0.20
D	0.028	0.035	0.70	0.90
E	0.008	0.014	0.20	0.35
F	0.039	0.055	1.00	1.40
G	0.055	0.071	1.40	1.80
H	0.016		0.40	

SOD-523 (REV: R3)

LEAD CODE:

- 1) Cathode
- 2) Anode

R3 (15-April 2011)

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

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