

CMOZ2V4 THRU CMOZ43V

**SURFACE MOUNT
SILICON ZENER DIODE
2.4 VOLTS THRU 43 VOLTS
5% TOLERANCE**



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ULTRAmimi™



SOD-523 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOZ2V4 Series Zener Diode is a high quality voltage regulator in an epoxy-molded ULTRAmimi™ package, designed for applications requiring low leakage.

MARKING CODE: SEE MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)	SYMBOL		UNITS
Power Dissipation (Note 1) ($T_A=50^\circ\text{C}$)	P_D	350	mW
Power Dissipation (Note 2)	P_D	300	mW
Power Dissipation (Note 3)	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance ($P_D=300\text{mW}$)	Θ_{JA}	417	$^\circ\text{C/W}$

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		MARKING CODE
	MIN V	NOM V	MAX V			I_R	@ V_R	
CMOZ2V4	2.28	2.4	2.52	5.0	100	25	1.0	F1
CMOZ2V6	2.47	2.6	2.73	5.0	100	25	1.0	F1A
CMOZ2V7	2.57	2.7	2.84	5.0	100	10	1.0	F2
CMOZ3V0	2.85	3.0	3.15	5.0	95	5.0	1.0	F3
CMOZ3V3	3.14	3.3	3.47	5.0	95	2.0	1.0	F4
CMOZ3V6	3.42	3.6	3.78	5.0	90	2.0	1.0	F5
CMOZ3V9	3.71	3.9	4.10	5.0	90	2.0	1.0	F6
CMOZ4V3	4.09	4.3	4.52	5.0	90	1.0	1.0	F7
CMOZ4V7	4.47	4.7	4.94	5.0	80	3.0	2.0	F8
CMOZ5V1	4.85	5.1	5.36	5.0	60	2.0	2.0	F9
CMOZ5V6	5.32	5.6	5.88	5.0	40	1.0	2.0	F0
CMOZ6V2	5.89	6.2	6.51	5.0	10	3.0	4.0	H1
CMOZ6V8	6.46	6.8	7.14	5.0	15	2.0	4.0	H2
CMOZ7V5	7.12	7.5	7.88	5.0	15	1.0	5.0	H3
CMOZ8V2	7.79	8.2	8.61	5.0	15	0.7	5.0	H4
CMOZ9V1	8.65	9.1	9.56	5.0	15	0.5	6.0	H5
CMOZ10V	9.50	10	10.50	5.0	20	0.2	7.0	H6

- 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

R6 (15-April 2011)

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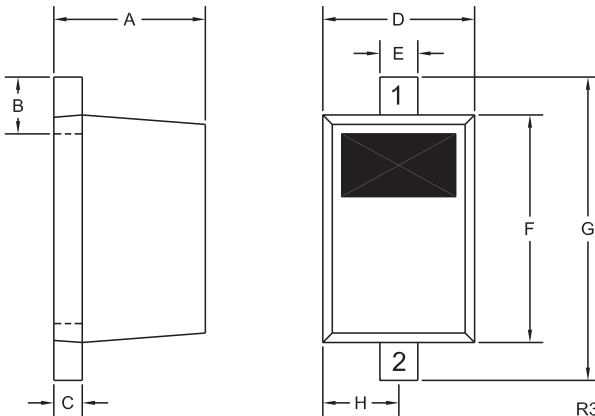
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$), $V_F=0.9$ MAX @ $I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MARKING CODE
	MIN V	NOM V	MAX V	mA	Ω	μA	V	
CMOZ11V	10.45	11	11.55	5.0	20	0.1	8.0	H7
CMOZ12V	11.40	12	12.60	5.0	25	0.1	8.0	H8
CMOZ13V	12.35	13	13.65	5.0	30	0.1	8.0	H9
CMOZ15V	14.25	15	15.75	5.0	30	0.05	10.5	H0
CMOZ16V	15.20	16	16.80	5.0	40	0.05	11.2	J1
CMOZ18V	17.10	18	18.90	5.0	45	0.05	12.6	J2
CMOZ20V	19.00	20	21.00	5.0	55	0.05	14.0	J3
CMOZ22V	20.90	22	23.10	5.0	55	0.05	15.4	J4
CMOZ24V	22.80	24	25.20	5.0	70	0.05	16.8	J5
CMOZ27V	25.65	27	28.35	5.0	80	0.05	18.9	J6
CMOZ30V	28.50	30	31.50	5.0	80	0.05	21.0	J7
CMOZ33V	31.35	33	34.65	5.0	80	0.05	23.1	J8
CMOZ36V	34.20	36	37.80	5.0	90	0.05	25.2	J9
CMOZ39V	37.05	39	40.95	5.0	130	0.05	27.3	J0
CMOZ43V	40.85	43	45.15	5.0	150	0.05	30.1	K1

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

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