

CMOZ2L4 THRU CMOZ43L

**SURFACE MOUNT ULTRAmi™
LOW LEVEL SILICON ZENER DIODE
2.4 VOLTS THRU 43 VOLTS
250mW, 5% TOLERANCE**

ULTRAmi™



SOD-523 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOZ2L4 Series Low Level Zener Diode is a high quality voltage regulator in an epoxy-molded ULTRAmi™ package, designed for applications requiring an extremely low operating current and low leakage.

MARKING CODE: SEE MARKING CODE ON ELECTRICAL CHARACTERISTIC TABLE

ABSOLUTE MAXIMUM RATINGS:

Power Dissipation ($T_A = 25^\circ\text{C}$)
Operating and Storage Temperature
Thermal Resistance

SYMBOL
 P_D
 T_J, T_{stg}
 Θ_{JA}

250
-65 to +150
500

UNIT
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		MARKING CODE
	MIN	NOM	MAX			$I_R @ V_R$	V_R	
	VOLTS	VOLTS	VOLTS					
CMOZ2L4	2.28	2.4	2.52	250	1400	25	1.0	M1
CMOZ2L5	2.37	2.5	2.63	250	1500	10	1.0	M2
CMOZ2L7	2.57	2.7	2.84	250	1500	5.0	1.0	M3
CMOZ3L0	2.85	3.0	3.15	250	1600	5.0	1.0	M30
CMOZ3L3	3.14	3.3	3.47	250	1600	5.0	1.0	M4
CMOZ3L6	3.42	3.6	3.78	250	1700	5.0	1.0	M5
CMOZ3L9	3.71	3.9	4.10	250	1600	5.0	1.0	M6
CMOZ4L3	4.09	4.3	4.52	250	1600	1.0	1.5	M7
CMOZ4L7	4.47	4.7	4.94	250	1500	1.0	1.5	M8
CMOZ5L1	4.85	5.1	5.36	250	1500	1.0	1.5	M9
CMOZ5L6	5.32	5.6	5.88	250	1400	1.0	2.0	M0
CMOZ6L2	5.89	6.2	6.51	250	1200	1.0	2.0	N1
CMOZ6L8	6.46	6.8	7.14	250	200	1.0	3.5	N2
CMOZ7L5	7.12	7.5	7.88	250	200	1.0	3.5	N3
CMOZ8L2	7.79	8.2	8.61	250	200	1.0	6.0	N4
CMOZ9L1	8.65	9.1	9.56	250	200	1.0	6.0	N5
CMOZ10L	9.50	10	10.50	250	200	1.0	8.0	N6
CMOZ11L	10.45	11	11.55	250	200	1.0	8.0	N7
CMOZ12L	11.40	12	12.60	250	200	1.0	10.5	N8
CMOZ13L	12.35	13	13.65	250	200	1.0	10.5	N9
CMOZ15L	14.25	15	15.75	250	100	1.0	11.5	N0

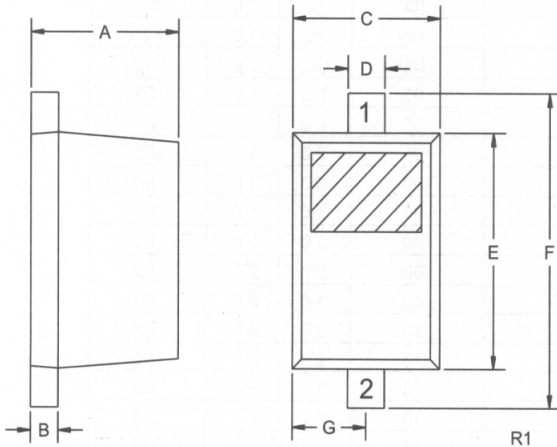
For Typical Electrical Characteristic Data for Zener Voltages 2.4V thru 6.2V and for 6.8V thru 43V, please see Process CPZ18 & CPZ19 on pages 888 & 889, respectively.

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ELECTRICAL CHARACTERISTICS (CONTINUED):

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MARKING CODE
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		
	VOLTS	VOLTS	VOLTS	μA	Ω	μA	VOLTS	
CMOZ16L	15.20	16	16.80	250	100	1.0	14	P1
CMOZ18L	17.10	18	18.90	250	100	1.0	16	P2
CMOZ20L	19.00	20	21.00	250	150	1.0	18	P3
CMOZ22L	20.90	22	23.10	250	150	1.0	20	P4
CMOZ24L	22.80	24	25.20	250	150	1.0	22	P5
CMOZ27L	25.65	27	28.35	250	150	1.0	24	P6
CMOZ30L	28.50	30	31.50	250	200	1.0	27	P7
CMOZ33L	31.35	33	34.65	250	250	1.0	30	P8
CMOZ36L	34.20	36	37.80	250	200	1.0	33	P9
CMOZ39L	37.05	39	40.95	250	200	1.0	36	P0
CMOZ43L	40.85	43	45.15	250	250	1.0	40	R1

SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) CATHODE
2) ANODE

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.004	0.008	0.10	0.20
C	0.028	0.035	0.70	0.90
D	0.008	0.011	0.20	0.28
E	0.039	0.055	1.00	1.40
F	0.055	0.071	1.40	1.80
G	0.016		0.40	

SOD-523 (REV: R1)

DATA SHEETS