



**CMDZ2V4  
THRU  
CMDZ47**

**SUPER-MINI ZENER DIODE  
2.4 VOLTS THRU 47 VOLTS  
250mW, 5% TOLERANCE**

**SUPER™  
mini**



**SOD-323 CASE**

**Central™  
Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDZ2V4 Series Silicon Zener Diode is a high quality voltage regulator, manufactured in a super-mini surface mount package, designed for use in industrial, commercial, entertainment and computer applications.

**ABSOLUTE MAXIMUM RATINGS:**  
Power Dissipation (@ $T_A=25^{\circ}\text{C}$ )  
Operating and Storage Temperature  
Thermal Resistance

**SYMBOL**  
 $P_D$   
 $T_J, T_{stg}$   
 $\theta_{JA}$

250  
-65 to +150  
500

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

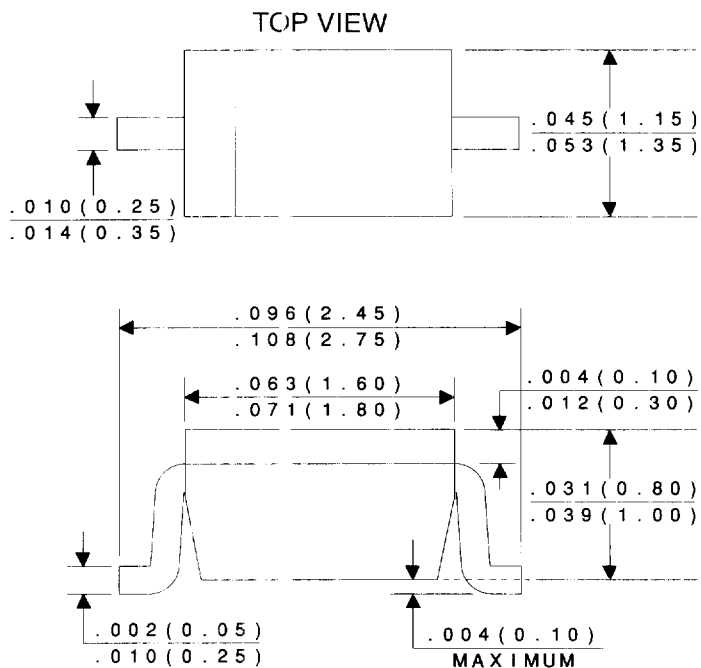
**ELECTRICAL CHARACTERISTICS:** ( $T_A=-25^{\circ}\text{C}$ ),  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  FOR ALL TYPES.

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT $I_{ZT}$ mA	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER VOLTAGE TEMPERATURE COEFFICIENT %/ $^{\circ}\text{C}$
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		
	VOLTS	VOLTS	VOLTS		$\Omega$	$\Omega$	mA	$\mu\text{A}$	VOLTS	
CMDZ2V4	2.280	2.4	2.520	5.0	100	600	1.0	50	1.0	-0.085
CMDZ2V7	2.565	2.7	2.835	5.0	100	600	1.0	20	1.0	-0.080
CMDZ3V0	2.850	3.0	3.150	5.0	95	600	1.0	10	1.0	-0.075
CMDZ3V3	3.135	3.3	3.465	5.0	95	600	1.0	5.0	1.0	-0.070
CMDZ3V6	3.420	3.6	3.780	5.0	90	600	1.0	5.0	1.0	-0.065
CMDZ3V9	3.705	3.9	4.095	5.0	90	600	1.0	3.0	1.0	-0.060
CMDZ4V3	4.085	4.3	4.515	5.0	90	600	1.0	3.0	1.0	$\pm 0.055$
CMDZ4V7	4.465	4.7	4.935	5.0	80	500	1.0	3.0	2.0	$\pm 0.030$
CMDZ5V1	4.845	5.1	5.355	5.0	60	480	1.0	2.0	2.0	$\pm 0.030$
CMDZ5V6	5.320	5.6	5.880	5.0	40	400	1.0	1.0	2.0	+0.038
CMDZ6V2	5.890	6.2	6.510	5.0	10	150	1.0	3.0	4.0	+0.045
CMDZ6V8	6.460	6.8	7.140	5.0	15	80	1.0	2.0	4.0	+0.050
CMDZ7V5	7.125	7.5	7.875	5.0	15	80	1.0	1.0	5.0	+0.058
CMDZ8V2	7.790	8.2	8.610	5.0	15	80	1.0	0.7	5.0	+0.062
CMDZ9V1	8.645	9.1	9.555	5.0	15	100	1.0	0.5	6.0	+0.068
CMDZ10	9.500	10	10.50	5.0	20	150	1.0	0.2	7.0	+0.075
CMDZ11	10.45	11	11.55	5.0	20	150	1.0	0.1	8.0	+0.076
CMDZ12	11.40	12	12.60	5.0	25	150	1.0	0.1	8.0	+0.077

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^{\circ}\text{C}$ ),  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  FOR ALL TYPES.

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER VOLTAGE TEMPERATURE COEFFICIENT
	MIN	NOM	MAX		$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	
	VOLTS	VOLTS	VOLTS	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	VOLTS	$\%/^{\circ}\text{C}$
CMDZ13	12.35	13	13.65	5.0	30	170	1.0	0.1	8.0	+0.079
CMDZ15	14.25	15	15.75	5.0	30	200	1.0	0.05	10.5	+0.082
CMDZ16	15.20	16	16.80	5.0	40	200	1.0	0.05	11.2	+0.083
CMDZ18	17.10	18	18.90	5.0	45	225	1.0	0.05	12.6	+0.085
CMDZ20	19.00	20	21.00	5.0	55	225	1.0	0.05	14.0	+0.086
CMDZ22	20.90	22	23.10	5.0	55	250	1.0	0.05	15.4	+0.087
CMDZ24	22.80	24	25.20	5.0	70	250	1.0	0.05	16.8	+0.088
CMDZ27	25.65	27	28.35	2.0	80	300	0.5	0.05	18.9	+0.090
CMDZ30	28.50	30	31.50	2.0	80	300	0.5	0.05	21.0	+0.091
CMDZ33	31.35	33	34.65	2.0	80	325	0.5	0.05	23.1	+0.092
CMDZ36	34.20	36	37.80	2.0	90	350	0.5	0.05	25.2	+0.093
CMDZ39	37.05	39	40.95	2.0	130	350	0.5	0.05	27.3	+0.094
CMDZ43	40.85	43	45.15	2.0	150	375	0.5	0.05	30.1	+0.095
CMDZ47	44.65	47	49.35	2.0	170	375	0.5	0.05	32.9	+0.095

All dimensions in inches (mm).



DATA SHEET