CMDZ1L8 THRU CMDZ47L

SUPERmini™
LOW LEVEL ZENER DIODE
250mW, 1.8 VOLTS THRU 47 VOLTS

SUPERmini™

SOD-323 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDZ1L8 Series Silicon Low Level Zener Diode is a high quality voltage regulator, manufactured in a SUPERmini™ surface mount package, designed for applications requiring a low operating current, low leakage, and a sharp knee.

MARKING CODE: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE

ABSOLUTE MAXIMUM RATINGS:

	SYMBOL		UNIT
Power Dissipation (@T_A=25°C)	P_D	250	mW
Operating and Storage Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C), V_F=0.9V Max @ I_F=10mA (FOR ALL TYPES)

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		
	V	V	V	µA	W	µA	V	
CMDZ1L8	1.710	1.8	1.890	500	1200	25	1.0	7N
CMDZ2L0	1.900	2.0	2.100	500	1100	25	1.0	8N
CMDZ2L2	2.090	2.2	2.310	500	1000	25	1.0	9N
CMDZ2L4	2.280	2.4	2.520	500	900	25	1.0	AP
CMDZ2L5	2.375	2.5	2.625	500	900	10	1.0	BP
CMDZ2L7	2.565	2.7	2.835	500	900	10	1.0	CP
CMDZ2L8	2.660	2.8	2.940	500	900	10	1.0	DP
CMDZ3L0	2.850	3.0	3.150	500	900	5.0	1.0	EP
CMDZ3L3	3.135	3.3	3.465	500	900	5.0	1.0	FP
CMDZ3L6	3.420	3.6	3.780	500	900	5.0	1.0	GP
CMDZ3L9	3.705	3.9	4.095	500	900	5.0	1.0	HP
CMDZ4L3	4.085	4.3	4.515	500	900	5.0	1.0	JP
CMDZ4L7	4.465	4.7	4.935	500	750	1.0	1.5	KP
CMDZ5L1	4.845	5.1	5.355	500	400	1.0	1.5	LP
CMDZ5L6	5.320	5.6	5.880	500	325	1.0	2.0	NP
CMDZ6L2	5.890	6.2	6.510	500	90	1.0	2.0	OP
CMDZ6L8	6.460	6.8	7.140	500	60	1.0	3.5	PP
CMDZ7L5	7.125	7.5	7.875	500	60	1.0	3.5	QP
CMDZ8L2	7.790	8.2	8.610	500	60	1.0	6.0	RP
CMDZ9L1	8.645	9.1	9.555	500	60	1.0	6.0	SP
CMDZ10L	9.50	10	10.50	500	80	1.0	8.0	TP
CMDZ11L	10.45	11	11.55	500	80	1.0	8.0	UP
CMDZ12L	11.40	12	12.60	500	80	1.0	10.5	VP
CMDZ13L	12.35	13	13.65	500	80	1.0	10.5	XP
CMDZ15L	14.25	15	15.75	500	80	1.0	11.5	YP

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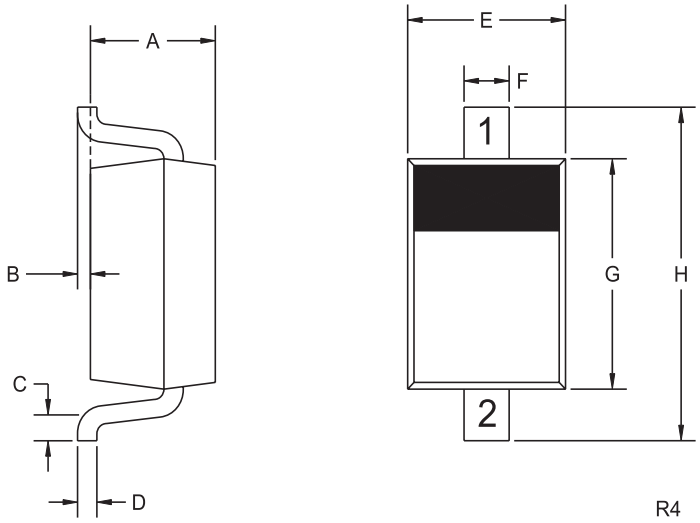
ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C)

V_F=0.9V Max @ I_F=10mA (FOR ALL TYPES)

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		
	V	V	V	μA	W	μA	V	
CMDZ16L	15.20	16	16.80	500	80	1.0	14	ZP
CMDZ18L	17.10	18	18.90	500	80	1.0	16	1P
CMDZ20L	19.00	20	21.00	500	100	1.0	18	2P
CMDZ22L	20.90	22	23.10	500	100	1.0	20	3P
CMDZ24L	22.80	24	25.20	500	120	1.0	22	4P
CMDZ27L	25.65	27	28.35	500	150	1.0	24	5P
CMDZ30L	28.50	30	31.50	500	200	1.0	27	6P
CMDZ33L	31.35	33	34.65	500	250	1.0	30	7P
CMDZ36L	34.20	36	37.80	500	300	1.0	33	8P
CMDZ39L	37.05	39	40.95	500	350	1.0	36	9P
CMDZ43L	40.85	43	45.15	500	400	1.0	40	AR
CMDZ47L	44.65	47	49.35	500	450	1.0	44	BR

SOD-323 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.031	0.039	0.80	1.00
B	0.000	0.004	0.00	0.10
C	0.008	-	0.20	-
D	0.004	0.007	0.11	0.19
E	0.045	0.053	1.15	1.35
F	-	0.014	-	0.35
G	0.063	0.071	1.60	1.80
H	0.094	0.102	2.40	2.60

SOD-323 (REV: R4)

Lead Code:
1) CATHODE
2) ANODE

R7 (1-November 2007)