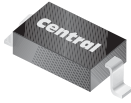


CMDZ1L8 THRU CMDZ47L

**SURFACE MOUNT SILICON
LOW LEVEL ZENER DIODE
250mW, 1.8 THRU 47 VOLTS
±5% TOLERANCE**

SUPERmini™



SOD-323 CASE



www.centralemi.com

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**

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)

Power Dissipation

Operating and Storage Junction 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: ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{V}$ Max @ $I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT	MARKING CODE
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	I_R @ V_R		ΘV_Z	
	V	V	V	μA	Ω	μA	V	$\%/^{\circ}\text{C}$	
CMDZ1L8	1.710	1.8	1.890	500	1200	25	1.0	-0.085	7N
CMDZ2L0	1.900	2.0	2.100	500	1100	25	1.0	-0.080	8N
CMDZ2L2	2.090	2.2	2.310	500	1000	25	1.0	-0.065	9N
CMDZ2L4	2.280	2.4	2.520	500	900	25	1.0	-0.060	AP
CMDZ2L5	2.375	2.5	2.625	500	900	10	1.0	-0.060	BP
CMDZ2L7	2.565	2.7	2.835	500	900	10	1.0	± 0.055	CP
CMDZ2L8	2.660	2.8	2.940	500	900	10	1.0	± 0.055	DP
CMDZ3L0	2.850	3.0	3.150	500	900	5.0	1.0	± 0.055	EP
CMDZ3L3	3.135	3.3	3.465	500	900	5.0	1.0	± 0.055	FP
CMDZ3L6	3.420	3.6	3.780	500	900	5.0	1.0	± 0.030	GP
CMDZ3L9	3.705	3.9	4.095	500	900	5.0	1.0	± 0.030	HP
CMDZ4L3	4.085	4.3	4.515	500	900	5.0	1.0	± 0.030	JP
CMDZ4L7	4.465	4.7	4.935	500	750	1.0	1.5	± 0.030	KP
CMDZ5L1	4.845	5.1	5.355	500	400	1.0	1.5	± 0.030	LP
CMDZ5L6	5.320	5.6	5.880	500	325	1.0	2.0	+0.038	NP
CMDZ6L2	5.890	6.2	6.510	500	90	1.0	2.0	+0.045	OP
CMDZ6L8	6.460	6.8	7.140	500	60	1.0	3.5	+0.050	PP
CMDZ7L5	7.125	7.5	7.875	500	60	1.0	3.5	+0.058	QP
CMDZ8L2	7.790	8.2	8.610	500	60	1.0	6.0	+0.062	RP
CMDZ9L1	8.645	9.1	9.555	500	60	1.0	6.0	+0.068	SP
CMDZ10L	9.50	10	10.50	500	80	1.0	8.0	+0.075	TP
CMDZ11L	10.45	11	11.55	500	80	1.0	8.0	+0.076	UP
CMDZ12L	11.40	12	12.60	500	80	1.0	10.5	+0.077	VP
CMDZ13L	12.35	13	13.65	500	80	1.0	10.5	+0.079	XP
CMDZ15L	14.25	15	15.75	500	80	1.0	11.5	+0.082	YP

R10 (21-October 2010)

CMDZ1L8 THRU CMDZ47L

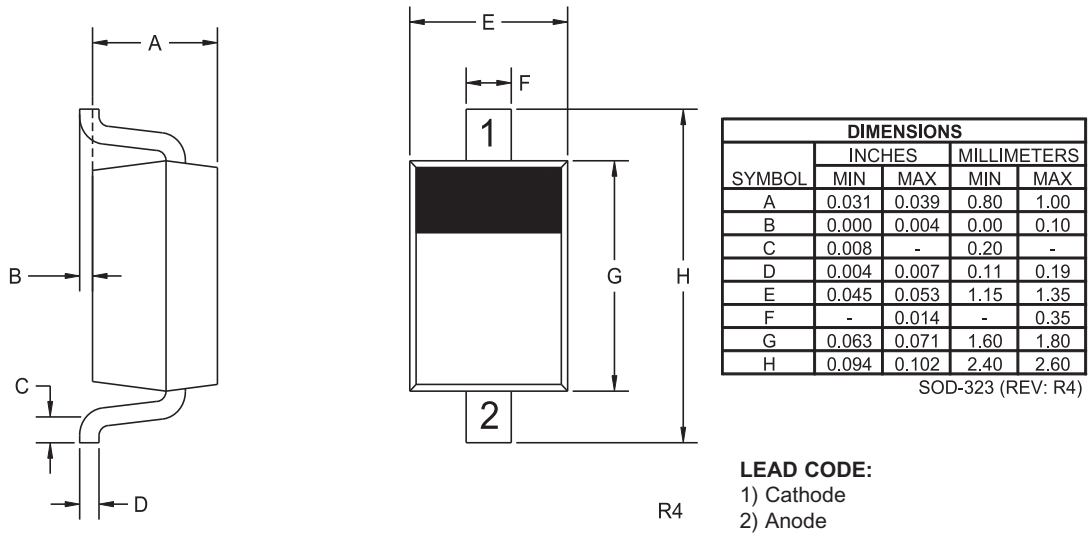
**SURFACE MOUNT SILICON
LOW LEVEL ZENER DIODE
250mW, 1.8 THRU 47 VOLTS
±5% TOLERANCE**



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

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT	MARKING CODE
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	I_R @ V_R		ϕV_Z	
	V	V	V	μA	Ω	μA	V	$\%/^\circ\text{C}$	
CMDZ16L	15.20	16	16.80	500	80	1.0	14	+0.083	ZP
CMDZ18L	17.10	18	18.90	500	80	1.0	16	+0.085	1P
CMDZ20L	19.00	20	21.00	500	100	1.0	18	+0.086	2P
CMDZ22L	20.90	22	23.10	500	100	1.0	20	+0.087	3P
CMDZ24L	22.80	24	25.20	500	120	1.0	22	+0.088	4P
CMDZ27L	25.65	27	28.35	500	150	1.0	24	+0.090	5P
CMDZ30L	28.50	30	31.50	500	200	1.0	27	+0.091	6P
CMDZ33L	31.35	33	34.65	500	250	1.0	30	+0.092	7P
CMDZ36L	34.20	36	37.80	500	300	1.0	33	+0.093	8P
CMDZ39L	37.05	39	40.95	500	350	1.0	36	+0.094	9P
CMDZ43L	40.85	43	45.15	500	400	1.0	40	+0.095	AR
CMDZ47L	44.65	47	49.35	500	450	1.0	44	+0.095	BR

SOD-323 CASE - MECHANICAL OUTLINE



R10 (21-October 2010)

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

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centalsemi.com

Worldwide Field Representatives:
www.centalsemi.com/wwreps

Worldwide Distributors:
www.centalsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centalsemi.com/terms

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

[CMDZ5260B](#) [CMDZ6L2](#) [CMDZ6L8](#) [CMDZ5232B](#) [CMDZ5234B](#) [CMDZ5236B](#) [CMDZ5238B](#) [CMDZ5239B](#)
[CMDZ9V1](#) [CMDZ9L1](#) [CMDZ7V5](#) [CMDZ7L5](#) [CMDZ5255B](#) [CMDZ5254B](#) [CMDZ5259B](#) [CMDZ5257B](#) [CMDZ5253B](#)
[CMDZ5252B](#) [CMDZ5251B](#) [CMDZ5258B](#) [CMDZ5221B](#) [CMDZ5229B](#) [CMDZ5225B](#) [CMDZ5227B](#) [CMDZ5261B](#)
[CMDZ33L](#) [CMDZ33V](#) [CMDZ3L0](#) [CMDZ3L6](#) [CMDZ3L3](#) [CMDZ4V7](#) [CMDZ6V8](#) [CMDZ4V3](#) [CMDZ6V2](#) [CMDZ5237B](#)
[CMDZ5233B](#) [CMDZ43V](#) [CMDZ8L2](#) [CMDZ8V2](#) [CMDZ4L3](#) [CMDZ13V](#) [CMDZ13L](#) [CMDZ2V7](#) [CMDZ11V](#)
[CMDZ11L](#) [CMDZ2V6](#) [CMDZ5247B](#) [CMDZ5245B](#) [CMDZ5249B](#) [CMDZ5246B](#) [CMDZ5243B](#) [CMDZ5224B](#)
[CMDZ5226B](#) [CMDZ5228B](#) [CMDZ47L](#) [CMDZ47V](#) [CMDZ43L](#) [CMDZ36L](#) [CMDZ36V](#) [CMDZ30V](#) [CMDZ3V0](#)
[CMDZ3V6](#) [CMDZ3V9](#) [CMDZ3V3](#) [CMDZ39V](#) [CMDZ30L](#) [CMDZ39L](#) [CMDZ2L0](#) [CMDZ16L](#) [CMDZ15V](#) [CMDZ2L5](#)
[CMDZ12L](#) [CMDZ2L8](#) [CMDZ10V](#) [CMDZ2L7](#) [CMDZ14L](#) [CMDZ16V](#) [CMDZ2L4](#) [CMDZ2L2](#) [CMDZ12V](#) [CMDZ14V](#)
[CMDZ18V](#) [CMDZ5V6](#) [CMDZ5V1](#) [CMDZ5L6](#) [CMDZ5L1](#) [CMDZ24V](#) [CMDZ22V](#) [CMDZ27V](#) [CMDZ27L](#) [CMDZ20L](#)
[CMDZ20V](#) [CMDZ22L](#) [CMDZ5248B](#) [CMDZ5244B](#) [CMDZ15L](#) [CMDZ5241B](#) [CMDZ10L](#) [CMDZ18L](#) [CMDZ24L](#)