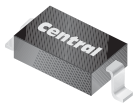
CMDZ1L8 THRU CMDZ47L

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

SUPERmini™



SOD-323 CASE

Central Semiconductor Corp.

www.centralsemi.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°C)	**SYMBOL**		**UNIT**
Power Dissipation	P_D	250	mW
Operating and Storage Junction 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		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	%/°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

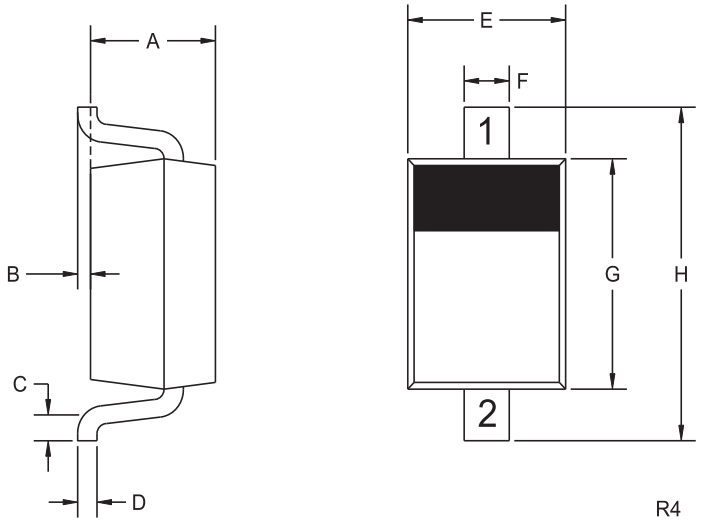
CMDZ1L8 THRU CMDZ47L

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

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		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	%/°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



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

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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.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.centralsemi.com/terms

https://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01277
Notification Date:	2/19/25
Last Buy Date:	8/19/25
Last Shipment Date	2/19/26

Summary:All devices manufactured in the SOD-323 package are discontinued and now classified as End of Life (EOL). Available options are: 1. Orders will be accepted for products with available inventory. 2. Last Time Buy (LTB) may be available for certain items. 3. A replacement product not available at the time of this notice, may be under development. Please contact your Central Semiconductor Customer Service Representative at 001.631.435.1110

Although Central Semiconductor makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CEN1095 BK	N/A
CEN1095 TR	N/A
CEN1208 BK	N/A
CEN1208 TR	N/A
CMDD2004 BK	N/A
CMDD2004 TR	N/A
CMDD3003 BK	N/A
CMDD3003 TR	N/A
CMDD4448 BK	N/A
CMDD4448 TR	N/A
CMDD6001 BK	N/A
CMDD6001 TR	N/A
CMDD6263 BK	N/A
CMDD6263 TR	N/A
CMDSH-3 BK	N/A
CMDSH-3 TR	N/A
CMDSH-4E BK	N/A
CMDSH-4E TR	N/A
CMDSH05-4 BK	N/A
CMDSH05-4 TR	N/A
CMDSH05-45 BK	N/A
CMDSH05-45 TR	N/A
CMDSH05-45 TR13	N/A
CMDSH2-3 BK	N/A
CMDSH2-3 TR	N/A
CMDSH2-4L BK	N/A
CMDSH2-4L TR	N/A
CMDZ1L8 BK	N/A
CMDZ1L8 TR	N/A
CMDZ10L BK	N/A
CMDZ10L TR	N/A
CMDZ10V BK	N/A
CMDZ10V TR	N/A

*** CONTINUED ***

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

https://www.centralsemi.com

Product End of Life Notification

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Last Shipment Date	2/19/26

*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ11L BK	N/A
CMDZ11L TR	N/A
CMDZ11V BK	N/A
CMDZ11V TR	N/A
CMDZ12L BK	N/A
CMDZ12L TR	N/A
CMDZ12V BK	N/A
CMDZ12V TR	N/A
CMDZ13L BK	N/A
CMDZ13L TR	N/A
CMDZ13V BK	N/A
CMDZ13V TR	N/A
CMDZ15L BK	N/A
CMDZ15L TR	N/A
CMDZ15LD BK	N/A
CMDZ15LD TR	N/A
CMDZ15V BK	N/A
CMDZ15V TR	N/A
CMDZ16L BK	N/A
CMDZ16L TR	N/A
CMDZ16V BK	N/A
CMDZ16V TR	N/A
CMDZ18L BK	N/A
CMDZ18L TR	N/A
CMDZ18V BK	N/A
CMDZ18V TR	N/A
CMDZ2L0 BK	N/A
CMDZ2L0 TR	N/A
CMDZ2L2 BK	N/A
CMDZ2L2 TR	N/A
CMDZ2L4 BK	N/A
CMDZ2L4 TR	N/A
CMDZ2L5 BK	N/A
CMDZ2L5 TR	N/A
CMDZ2L7 BK	N/A
CMDZ2L7 TR	N/A
CMDZ2L8 BK	N/A
CMDZ2L8 TR	N/A
CMDZ2V4 BK	N/A
CMDZ2V4 TR	N/A
CMDZ2V6 BK	N/A
CMDZ2V6 TR	N/A
CMDZ2V7 BK	N/A

*** CONTINUED ***

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*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ2V7 TR	N/A
CMDZ20L BK	N/A
CMDZ20L TR	N/A
CMDZ20V BK	N/A
CMDZ20V TR	N/A
CMDZ22L BK	N/A
CMDZ22L TR	N/A
CMDZ22V BK	N/A
CMDZ22V TR	N/A
CMDZ24L BK	N/A
CMDZ24L TR	N/A
CMDZ24V BK	N/A
CMDZ24V TR	N/A
CMDZ27L BK	N/A
CMDZ27L TR	N/A
CMDZ27V BK	N/A
CMDZ27V TR	N/A
CMDZ3L0 BK	N/A
CMDZ3L0 TR	N/A
CMDZ3L3 BK	N/A
CMDZ3L3 TR	N/A
CMDZ3L6 BK	N/A
CMDZ3L6 TR	N/A
CMDZ3L9 BK	N/A
CMDZ3L9 TR	N/A
CMDZ3V0 BK	N/A
CMDZ3V0 TR	N/A
CMDZ3V3 BK	N/A
CMDZ3V3 TR	N/A
CMDZ3V6 BK	N/A
CMDZ3V6 TR	N/A
CMDZ3V9 BK	N/A
CMDZ3V9 TR	N/A
CMDZ30L BK	N/A
CMDZ30L TR	N/A
CMDZ30V BK	N/A
CMDZ30V TR	N/A
CMDZ33L BK	N/A
CMDZ33L TR	N/A
CMDZ33V BK	N/A
CMDZ33V TR	N/A
CMDZ36L BK	N/A
CMDZ36L TR	N/A

*** CONTINUED ***

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*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ36V BK	N/A
CMDZ36V TR	N/A
CMDZ39L BK	N/A
CMDZ39L TR	N/A
CMDZ39V BK	N/A
CMDZ39V TR	N/A
CMDZ4L3 BK	N/A
CMDZ4L3 TR	N/A
CMDZ4L7 BK	N/A
CMDZ4L7 TR	N/A
CMDZ4V3 BK	N/A
CMDZ4V3 TR	N/A
CMDZ4V7 BK	N/A
CMDZ4V7 TR	N/A
CMDZ43L BK	N/A
CMDZ43L TR	N/A
CMDZ43V BK	N/A
CMDZ43V TR	N/A
CMDZ47L BK	N/A
CMDZ47L TR	N/A
CMDZ47V BK	N/A
CMDZ47V TR	N/A
CMDZ5L1 BK	N/A
CMDZ5L1 TR	N/A
CMDZ5L6 BK	N/A
CMDZ5L6 TR	N/A
CMDZ5V1 BK	N/A
CMDZ5V1 TR	N/A
CMDZ5V6 BK	N/A
CMDZ5V6 TR	N/A
CMDZ5221B BK	N/A
CMDZ5221B TR	N/A
CMDZ5222B BK	N/A
CMDZ5222B TR	N/A
CMDZ5223B BK	N/A
CMDZ5223B TR	N/A
CMDZ5224B BK	N/A
CMDZ5224B TR	N/A
CMDZ5225B BK	N/A
CMDZ5225B TR	N/A
CMDZ5226B BK	N/A
CMDZ5226B TR	N/A
CMDZ5227B BK	N/A

*** CONTINUED ***

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*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ5227B TR	N/A
CMDZ5228B BK	N/A
CMDZ5228B TR	N/A
CMDZ5229B BK	N/A
CMDZ5229B TR	N/A
CMDZ5230B BK	N/A
CMDZ5230B TR	N/A
CMDZ5231B BK	N/A
CMDZ5231B TR	N/A
CMDZ5232B BK	N/A
CMDZ5232B TR	N/A
CMDZ5233B BK	N/A
CMDZ5233B TR	N/A
CMDZ5234B BK	N/A
CMDZ5234B TR	N/A
CMDZ5235B BK	N/A
CMDZ5235B TR	N/A
CMDZ5236B BK	N/A
CMDZ5236B TR	N/A
CMDZ5237B BK	N/A
CMDZ5237B TR	N/A
CMDZ5238B BK	N/A
CMDZ5238B TR	N/A
CMDZ5239B BK	N/A
CMDZ5239B TR	N/A
CMDZ5240B BK	N/A
CMDZ5240B TR	N/A
CMDZ5241B BK	N/A
CMDZ5241B TR	N/A
CMDZ5242B BK	N/A
CMDZ5242B TR	N/A
CMDZ5243B BK	N/A
CMDZ5243B TR	N/A
CMDZ5244B BK	N/A
CMDZ5244B TR	N/A
CMDZ5245B BK	N/A
CMDZ5245B TR	N/A
CMDZ5246B BK	N/A
CMDZ5246B TR	N/A
CMDZ5247B BK	N/A
CMDZ5247B TR	N/A
CMDZ5248B BK	N/A
CMDZ5248B TR	N/A

*** CONTINUED ***

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*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ5249B BK	N/A
CMDZ5249B TR	N/A
CMDZ5250B BK	N/A
CMDZ5250B TR	N/A
CMDZ5251B BK	N/A
CMDZ5251B TR	N/A
CMDZ5252B BK	N/A
CMDZ5252B TR	N/A
CMDZ5253B BK	N/A
CMDZ5253B TR	N/A
CMDZ5254B BK	N/A
CMDZ5254B TR	N/A
CMDZ5255B BK	N/A
CMDZ5255B TR	N/A
CMDZ5256B BK	N/A
CMDZ5256B TR	N/A
CMDZ5257B BK	N/A
CMDZ5257B TR	N/A
CMDZ5258B BK	N/A
CMDZ5258B TR	N/A
CMDZ5259B BK	N/A
CMDZ5259B TR	N/A
CMDZ5259B TR13	N/A
CMDZ5260B BK	N/A
CMDZ5260B TR	N/A
CMDZ5261B BK	N/A
CMDZ5261B TR	N/A
CMDZ6L2 BK	N/A
CMDZ6L2 TR	N/A
CMDZ6L8 BK	N/A
CMDZ6L8 TR	N/A
CMDZ6V2 BK	N/A
CMDZ6V2 TR	N/A
CMDZ6V8 BK	N/A
CMDZ6V8 TR	N/A
CMDZ7L5 BK	N/A
CMDZ7L5 TR	N/A
CMDZ7V5 BK	N/A
CMDZ7V5 TR	N/A
CMDZ8L2 BK	N/A
CMDZ8L2 TR	N/A
CMDZ8V2 BK	N/A
CMDZ8V2 TR	N/A

*** CONTINUED ***

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*** CONTINUED FROM PRIOR PAGE ***

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CMDZ9L1 BK	N/A
CMDZ9L1 TR	N/A
CMDZ9V1 BK	N/A
CMDZ9V1 TR	N/A
HCMDD2004 BK	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

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