

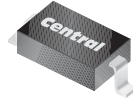
**CMDZ1L8 THRU CMDZ47L**

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



[www.centrasemi.com](http://www.centrasemi.com)

**SUPERmini™**



**SOD-323 CASE**

**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<sub>A</sub>=25°C)**

Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

P<sub>D</sub> 250  
T<sub>J</sub>, T<sub>stg</sub> -65 to +150  
θ<sub>JA</sub> 500

**UNIT**

mW  
°C  
°C/W

**ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C), V<sub>F</sub>=0.9V Max @ I<sub>F</sub>=10mA (for all types)**

TYPE	ZENER VOLTAGE V <sub>Z</sub> @ I <sub>ZT</sub>			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT	MARKING CODE
	MIN	NOM	MAX	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	I <sub>R</sub> @ V <sub>R</sub>	θV <sub>Z</sub>		
	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	

R10 (21-October 2010)

**CMDZ1L8 THRU CMDZ47L**

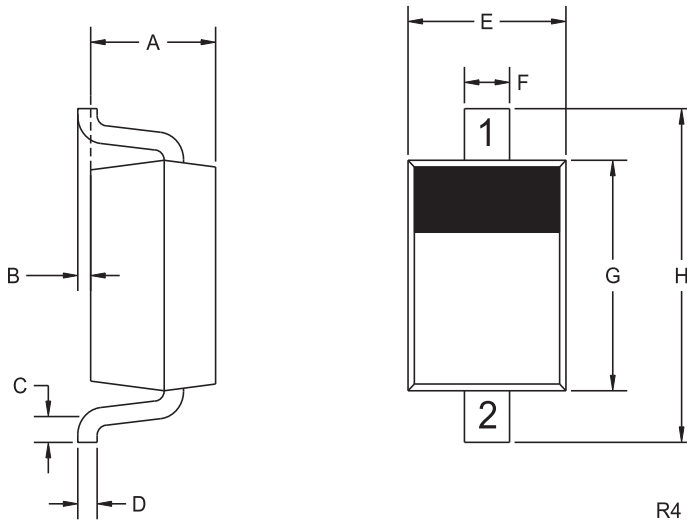
**SURFACE MOUNT SILICON  
LOW LEVEL ZENER DIODE  
250mW, 1.8 THRU 47 VOLTS  
±5% TOLERANCE**



**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 $I_{ZT}$	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT $\theta_{VZ}$	MARKING CODE
	MIN	NOM	MAX			$I_R @ V_R$			
	V	V	V			$\mu\text{A}$	V		
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**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
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 (2<sup>nd</sup> 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.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.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.centrasemi.com/terms](http://www.centrasemi.com/terms)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [Central Semiconductor](#) manufacturer:*

Other Similar products are found below :

[MMSZ5245BS-7-F](#) [RKZ13B2KG#P1](#) [RKZ5.6B2KJ#R1](#) [EDZTE6113B](#) [EDZTE6116B](#) [EDZTE616.8B](#) [1N747A](#) [1N966B](#) [NTE5116A](#)  
[NTE5121A](#) [NTE5139A](#) [NTE5147A](#) [NTE5152A](#) [NTE5156A](#) [NTE5164A](#) [JANS1N4974US](#) [SMAJ4764A-TP](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5920B-TP](#) [3SMBJ5925B-TP](#) [TDZTR24](#) [441774C](#) [MMSZ4678-TP](#) [MMSZ5232BQ-13-F](#)  
[BZG04-36](#) [BZG05C9V1-HE3-TR](#) [HZM30NBTR-E](#) [UDZTE-175.1B](#) [3SMAJ5945B-TP](#) [3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4746A-TP](#)  
[RKZ18B2KK#R1](#) [RKZ10B2KL#R1](#) [RKZ6.8B2KL#R1](#) [RKZ8.2B2KL#R1](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [SMBZ5920B-E3/52](#) [ZMM3.0](#)  
[RD16UM-T1-A](#) [RD39S-T1-A](#) [RD9.1S-T1-A](#) [RD10S-T1-A](#) [RD20S-T1-A](#) [RD2.2S-T1-A](#) [RD2.7UM-T1-A](#) [HZM24NB1TL-E](#)