

CMDZ1L8F THRU CMDZ47LF

**SURFACE MOUNT SILICON
LOW LEVEL ZENER DIODE
200mW, 1.8 THRU 47 VOLTS
±5% TOLERANCE**


www.centrasemi.com
SUPERmini™

SOD-323F CASE
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDZ1L8F 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}

200

-65 to +150

650

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	$\%/^\circ\text{C}$	
CMDZ1L8F	1.710	1.8	1.890	500	1200	25	1.0	-0.085	7NF
CMDZ2L0F	1.900	2.0	2.100	500	1100	25	1.0	-0.080	8NF
CMDZ2L2F	2.090	2.2	2.310	500	1000	25	1.0	-0.065	9NF
CMDZ2L4F	2.280	2.4	2.520	500	900	25	1.0	-0.060	APF
CMDZ2L5F	2.375	2.5	2.625	500	900	10	1.0	-0.060	BPF
CMDZ2L7F	2.565	2.7	2.835	500	900	10	1.0	± 0.055	CPF
CMDZ2L8F	2.660	2.8	2.940	500	900	10	1.0	± 0.055	DPF
CMDZ3L0F	2.850	3.0	3.150	500	900	5.0	1.0	± 0.055	EPF
CMDZ3L3F	3.135	3.3	3.465	500	900	5.0	1.0	± 0.055	FPF
CMDZ3L6F	3.420	3.6	3.780	500	900	5.0	1.0	± 0.030	GPF
CMDZ3L9F	3.705	3.9	4.095	500	900	5.0	1.0	± 0.030	HPF
CMDZ4L3F	4.085	4.3	4.515	500	900	5.0	1.0	± 0.030	JPF
CMDZ4L7F	4.465	4.7	4.935	500	750	1.0	1.5	± 0.030	KPF
CMDZ5L1F	4.845	5.1	5.355	500	400	1.0	1.5	± 0.030	LPF
CMDZ5L6F	5.320	5.6	5.880	500	325	1.0	2.0	+0.038	NPF
CMDZ6L2F	5.890	6.2	6.510	500	90	1.0	2.0	+0.045	OPF
CMDZ6L8F	6.460	6.8	7.140	500	60	1.0	3.5	+0.050	PPF
CMDZ7L5F	7.125	7.5	7.875	500	60	1.0	3.5	+0.058	QPF
CMDZ8L2F	7.790	8.2	8.610	500	60	1.0	6.0	+0.062	RPF
CMDZ9L1F	8.645	9.1	9.555	500	60	1.0	6.0	+0.068	SPF
CMDZ10LF	9.50	10	10.50	500	80	1.0	8.0	+0.075	TPF
CMDZ11LF	10.45	11	11.55	500	80	1.0	8.0	+0.076	UPF
CMDZ12LF	11.40	12	12.60	500	80	1.0	10.5	+0.077	VPF
CMDZ13LF	12.35	13	13.65	500	80	1.0	10.5	+0.079	XPF
CMDZ15LF	14.25	15	15.75	500	80	1.0	11.5	+0.082	YPF

CMDZ1L8F THRU CMDZ47LF

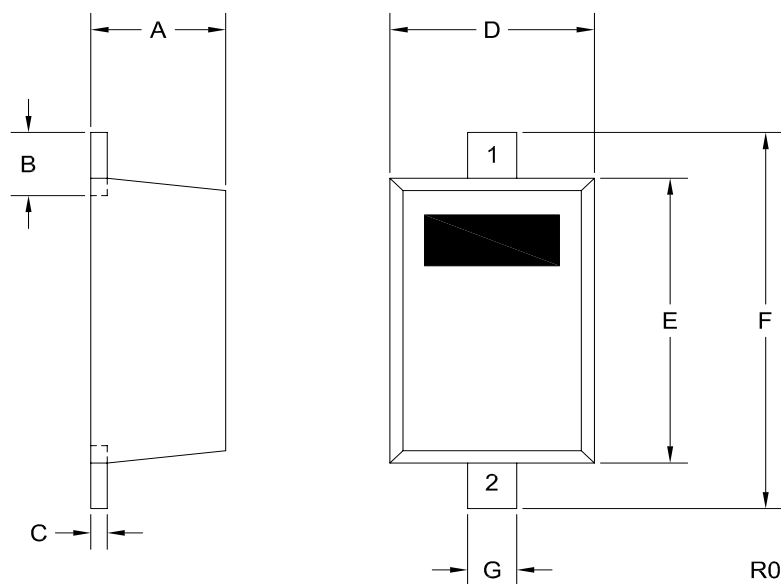
SURFACE MOUNT SILICON
LOW LEVEL ZENER DIODE
200mW, 1.8 THRU 47 VOLTS
±5% TOLERANCE



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		$\ominus V_Z$	
	V	V	V	μA	Ω	μA	V	$\%/^{\circ}\text{C}$	
CMDZ16LF	15.20	16	16.80	500	80	1.0	14	+0.083	ZPF
CMDZ18LF	17.10	18	18.90	500	80	1.0	16	+0.085	1PF
CMDZ20LF	19.00	20	21.00	500	100	1.0	18	+0.086	2PF
CMDZ22LF	20.90	22	23.10	500	100	1.0	20	+0.087	3PF
CMDZ24LF	22.80	24	25.20	500	120	1.0	22	+0.088	4PF
CMDZ27LF	25.65	27	28.35	500	150	1.0	24	+0.090	5PF
CMDZ30LF	28.50	30	31.50	500	200	1.0	27	+0.091	6PF
CMDZ33LF	31.35	33	34.65	500	250	1.0	30	+0.092	7PF
CMDZ36LF	34.20	36	37.80	500	300	1.0	33	+0.093	8PF
CMDZ39LF	37.05	39	40.95	500	350	1.0	36	+0.094	9PF
CMDZ43LF	40.85	43	45.15	500	400	1.0	40	+0.095	ARF
CMDZ47LF	44.65	47	49.35	500	450	1.0	44	+0.095	BRF

SOD-323F CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.028	0.035	0.70	0.90
B	0.012	-	0.30	-
C	0.002	0.006	0.05	0.15
D	0.045	0.053	1.15	1.35
E	0.069	0.077	1.75	1.95
F	0.091	0.106	2.30	2.70
G	0.010	0.014	0.25	0.35

SOD-323F (REV:R1)

LEAD CODE:

- 1) Cathode
- 2) Anode

R0 (6-March 2025)

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
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