

CMLZDA2V4
THRU
CMLZDA47V

SURFACE MOUNT
DUAL, COMMON ANODE
SILICON ZENER DIODE
2.4 VOLTS THRU 47 VOLTS

PICOmini™



SOT-563 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLZDA2V4 Series silicon dual zener diode is a highly quality voltage regulator, connected in a common anode configuration, for use in industrial, commercial, entertainment and computer applications.

MARKING CODE: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE

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

Power Dissipation

Operating and Storage Temperature

Thermal Resistance

SYMBOL

P_D 250
 T_J, T_{stg} -65 TO +150
 θ_{JA} 500

UNITS

mW
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^{\circ}\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ FOR ALL TYPES.

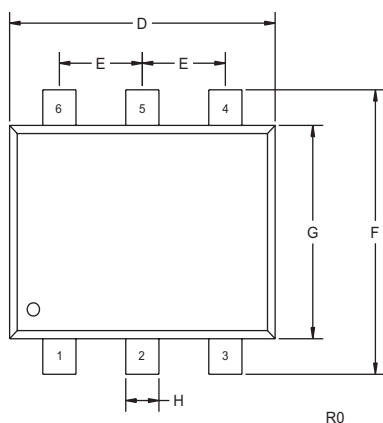
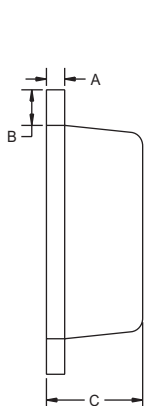
TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT I_{ZM}	MAXIMUM ZENER VOLTAGE TEMP. COEFF. θV_Z	MARKING CODE
	MIN	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$				
	VOLTS	VOLTS		Ω	Ω	mA	μA	VOLTS		% / $^{\circ}\text{C}$	
CMLZDA2V4	2.2	2.6	5.0	100	600	1.0	50	1.0	63	-0.06	CW3
CMLZDA2V7	2.5	2.9	5.0	100	600	1.0	20	1.0	57	-0.06	CW4
CMLZDA3V0	2.8	3.2	5.0	95	600	1.0	10	1.0	54	-0.06	CW5
CMLZDA3V3	3.1	3.5	5.0	95	600	1.0	5.0	1.0	47	-0.06	CW6
CMLZDA3V6	3.4	3.8	5.0	95	600	1.0	2.0	1.0	45	-0.06	CW7
CMLZDA3V9	3.7	4.1	5.0	90	600	1.0	2.0	1.0	43	-0.06	CW8
CMLZDA4V3	4.0	4.6	5.0	90	600	1.0	1.0	1.0	40	-0.05	CW9
CMLZDA4V7	4.4	5.0	5.0	80	500	1.0	3.0	2.0	38	-0.03	CZ1
CMLZDA5V1	4.8	5.4	5.0	60	480	1.0	2.0	2.0	35	0.02	CZ2
CMLZDA5V6	5.2	6.0	5.0	40	400	1.0	1.0	2.0	32	0.03	CZ3
CMLZDA6V2	5.8	6.6	5.0	10	150	1.0	3.0	4.0	28	0.04	CZ4
CMLZDA6V8	6.5	7.2	5.0	15	80	1.0	2.0	4.0	25	0.05	CZ5
CMLZDA7V5	7.0	7.9	5.0	15	80	1.0	1.0	5.0	23	0.05	CZ6
CMLZDA8V2	7.7	8.7	5.0	15	80	1.0	0.7	5.0	21	0.06	CZ7
CMLZDA9V1	8.5	9.6	5.0	15	100	1.0	0.5	6.0	18	0.06	CZ8
CMLZDA10V	9.4	10.6	5.0	20	150	1.0	0.2	7.0	16	0.07	CZ9
CMLZDA11V	10.4	11.6	5.0	20	150	1.0	0.1	8.0	15	0.07	CY1
CMLZDA12V	11.4	12.7	5.0	25	150	1.0	0.1	8.0	13	0.07	CY2
CMLZDA13V	12.4	14.1	5.0	30	170	1.0	0.1	8.0	12	0.08	CY3
CMLZDA15V	13.8	15.6	5.0	30	200	1.0	0.05	10.5	11	0.08	CY4
CMLZDA16V	15.3	17.1	5.0	40	200	1.0	0.05	11.2	10	0.08	CY5

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ELECTRICAL CHARACTERISTICS PER DIODE (Continued)

TYPE NO.	ZENER VOLTAGE V _Z @ I _{ZT}		TEST CURRENT I _{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT I _{ZM}	MAXIMUM ZENER VOLTAGE TEMP. COEFF. θV _Z	MARKING CODE
	MIN	MAX		Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _R @ V _R					
	VOLTS	VOLTS		Ω	Ω	mA	μA	VOLTS			
CMLZDA18V	16.8	19.1	5.0	45	225	1.0	0.05	12.6	9.2	0.08	CY6
CMLZDA20V	18.8	21.2	5.0	55	225	1.0	0.05	14.0	8.3	0.08	CY7
CMLZDA22V	20.8	23.3	5.0	55	250	1.0	0.05	15.4	7.6	0.09	CY8
CMLZDA24V	22.8	25.6	5.0	70	250	1.0	0.05	16.8	7.0	0.09	CY9
CMLZDA27V	25.1	28.9	2.0	80	300	0.5	0.05	18.9	6.2	0.09	CYA
CMLZDA30V	28.0	32.0	2.0	80	300	0.5	0.05	21.0	5.6	0.09	CYB
CMLZDA33V	31.0	35.0	2.0	80	325	0.5	0.05	23.1	5.0	0.09	CYC
CMLZDA36V	34.0	38.0	2.0	90	350	0.5	0.05	25.2	4.6	0.09	CYD
CMLZDA39V	37.0	41.0	2.0	130	350	0.5	0.05	27.3	4.3	0.09	CYE
CMLZDA43V	40.0	46.0	2.0	150	375	0.5	0.05	30.1	3.9	0.10	CYF
CMLZDA47V	44.0	50.0	2.0	170	375	0.5	0.05	32.9	3.5	0.10	CYH

SOT-563 CASE - MECHANICAL OUTLINE



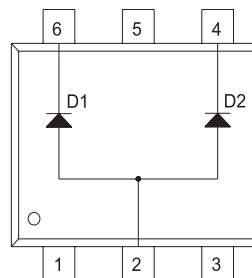
SYMBOL	DIMENSIONS		MIN	MAX
	INCHES	MILLIMETERS		
A	0.004	0.007	0.10	0.18
B	0.008	0.20		
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020	0.50		
F	0.061	0.067	1.55	1.70
G	0.047	1.20		
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

LEAD CODE:

- 1) NC
- 2) Anode D1, D2
- 3) NC
- 4) Cathode D2
- 5) NC
- 6) Cathode D1

MARKING CODE: See Marking Codes on Electrical Characteristics table.



R0 (12-April 2005)