

CMLZDA2V4  
THRU  
CMLZDA47V  
SURFACE MOUNT SILICON  
DUAL, COMMON ANODE  
ZENER DIODES  
2.4 VOLT THRU 47 VOLT



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLZDA2V4 series silicon dual zener diode is a high 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**



SOT-563 CASE

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

Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

$P_D$  250  
 $T_J, T_{stg}$  -65 TO +150  
 $\theta_{JA}$  500

**UNITS**

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		TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM ZENER VOLTAGE TEMP. COEFF.	MARKING CODE
	$V_Z @ I_{ZT}$			$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$					
	MIN V	MAX V	$I_{ZT}$ mA			$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	
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

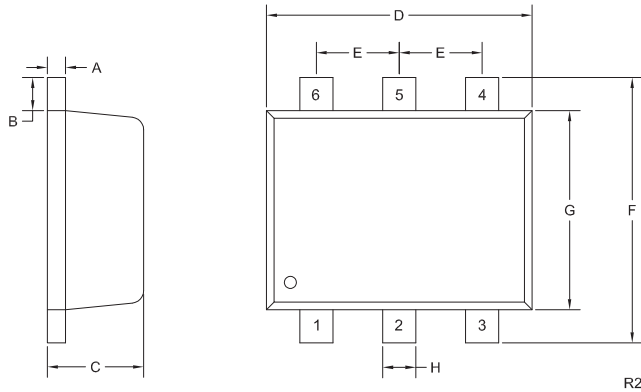
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**ELECTRICAL CHARACTERISTICS - Continued:** ( $T_A=25^{\circ}\text{C}$ )  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $I_{ZM}$	MAXIMUM ZENER VOLTAGE TEMP. COEFF. $\Theta V_Z$	MARKING CODE
	MIN	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$\mu\text{A}$	V			
	V	V	$\Omega$		$\Omega$	mA			mA	% / $^{\circ}\text{C}$	
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			
	INCHES		MILLIMETERS	
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

**LEAD CODE:**

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

R3 (1-July 2015)

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#### **SERVICES**

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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In no event shall Central's aggregate liability from any warranty, indemnity, or other obligation arising out of or in connection with a purchase order or contract, or any use of any Central product provided hereunder, exceed the total amount paid to Central for the specific products sold under a purchase order or contract with respect to which losses or damages are claimed. The existence of more than one (1) claim against the specific products sold to Buyer under a purchase order or contract shall not enlarge or extend this limit.

Buyer understands and agrees that the foregoing liability limitations are essential elements of a purchase order or contract and that in the absence of such limitations, the material and economic terms of the purchase order or contract would be substantially different.

R3 (1-July 2015)