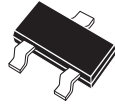


**CMPZDA2V4  
THRU  
CMPZDA47V**

**SURFACE MOUNT  
DUAL, SILICON ZENER DIODE  
2.4 VOLTS THRU 47 VOLTS  
350mW**



**SOT-23 CASE**

# Central™

**Semiconductor Corp.**

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPZDA2V4 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**

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

Power Dissipation

Operating and Storage Temperature

Thermal Resistance

## SYMBOL

$P_D$

$T_J, T_{stg}$

$\Theta_{JA}$

350

-65 to +150

357

## UNITS

mW

$^{\circ}\text{C}$

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

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

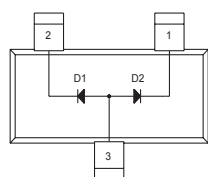
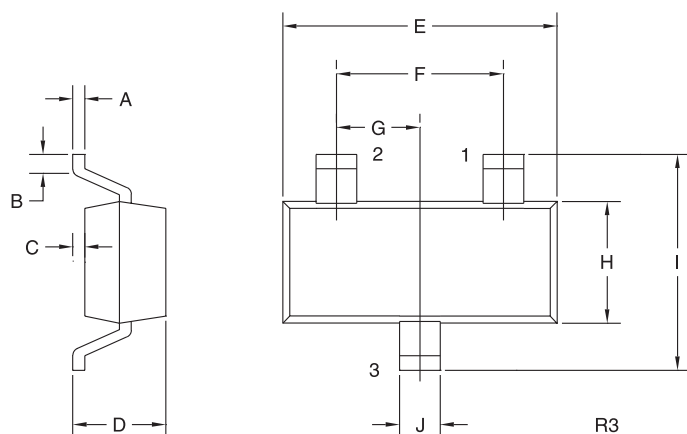
TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $I_{ZM}$	MAXIMUM ZENER VOLTAGE TEMP. COEFF. $\Theta V_Z$	MARKING CODE
	MIN	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R$	$V_R$			
	VOLTS	VOLTS		$\Omega$	$\Omega$	mA	$\mu\text{A}$	VOLTS		% / $^{\circ}\text{C}$	
CMPZDA2V4	2.2	2.6	5.0	100	600	1.0	50	1.0	63	-0.06	WW3
CMPZDA2V7	2.5	2.9	5.0	100	600	1.0	20	1.0	57	-0.06	WW4
CMPZDA3V0	2.8	3.2	5.0	95	600	1.0	10	1.0	54	-0.06	WW5
CMPZDA3V3	3.1	3.5	5.0	95	600	1.0	5.0	1.0	47	-0.06	WW6
CMPZDA3V6	3.4	3.8	5.0	95	600	1.0	2.0	1.0	45	-0.06	WW7
CMPZDA3V9	3.7	4.1	5.0	90	600	1.0	2.0	1.0	43	-0.06	WW8
CMPZDA4V3	4.0	4.6	5.0	90	600	1.0	1.0	1.0	40	-0.05	WW9
CMPZDA4V7	4.4	5.0	5.0	80	500	1.0	3.0	2.0	38	-0.03	ZZ1
CMPZDA5V1	4.8	5.4	5.0	60	480	1.0	2.0	2.0	35	0.02	ZZ2
CMPZDA5V6	5.2	6.0	5.0	40	400	1.0	1.0	2.0	32	0.03	ZZ3
CMPZDA6V2	5.8	6.6	5.0	10	150	1.0	3.0	4.0	28	0.04	ZZ4
CMPZDA6V8	6.5	7.2	5.0	15	80	1.0	2.0	4.0	25	0.05	ZZ5
CMPZDA7V5	7.0	7.9	5.0	15	80	1.0	1.0	5.0	23	0.05	ZZ6
CMPZDA8V2	7.7	8.7	5.0	15	80	1.0	0.7	5.0	21	0.06	ZZ7
CMPZDA9V1	8.5	9.6	5.0	15	100	1.0	0.5	6.0	18	0.06	ZZ8
CMPZDA10V	9.4	10.6	5.0	20	150	1.0	0.2	7.0	16	0.07	ZZ9
CMPZDA11V	10.4	11.6	5.0	20	150	1.0	0.1	8.0	15	0.07	YY1
CMPZDA12V	11.4	12.7	5.0	25	150	1.0	0.1	8.0	13	0.07	YY2
CMPZDA13V	12.4	14.1	5.0	30	170	1.0	0.1	8.0	12	0.08	YY3
CMPZDA15V	13.8	15.6	5.0	30	200	1.0	0.05	10.5	11	0.08	YY4
CMPZDA16V	15.3	17.1	5.0	40	200	1.0	0.05	11.2	10	0.08	YY5
CMPZDA18V	16.8	19.1	5.0	45	225	1.0	0.05	12.6	9.2	0.08	YY6
CMPZDA20V	18.8	21.2	5.0	55	225	1.0	0.05	14.0	8.3	0.08	YY7
CMPZDA22V	20.8	23.3	5.0	55	250	1.0	0.05	15.4	7.6	0.09	YY8

R6 (6-August 2003)

## ELECTRICAL CHARACTERISTICS (Continued)

TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$		TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM ZENER VOLTAGE TEMP. COEFF.	MARKING CODE	
	MIN	MAX		$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$I_{ZM}$				$\theta V_Z$
	VOLTS	VOLTS		mA	$\Omega$	$\Omega$ mA	$\mu A$ VOLTS	mA				% / °C
CMPZDA24V	22.8	25.6	5.0	70	250	1.0	0.05	16.8	7.0	0.09	YY9	
CMPZDA27V	25.1	28.9	2.0	80	300	0.5	0.05	18.9	6.2	0.09	W10	
CMPZDA30V	28.0	32.0	2.0	80	300	0.5	0.05	21.0	5.6	0.09	W11	
CMPZDA33V	31.0	35.0	2.0	80	325	0.5	0.05	23.1	5.0	0.09	W12	
CMPZDA36V	34.0	38.0	2.0	90	350	0.5	0.05	25.2	4.6	0.09	W13	
CMPZDA39V	37.0	41.0	2.0	130	350	0.5	0.05	27.3	4.3	0.09	W14	
CMPZDA43V	40.0	46.0	2.0	150	375	0.5	0.05	30.1	3.9	0.10	W15	
CMPZDA47V	44.0	50.0	2.0	170	375	0.5	0.05	32.9	3.5	0.10	W16	

## SOT-23 CASE - MECHANICAL OUTLINE



### LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, Anode D2

### MARKING CODE:

See Marking Codes on Electrical Characteristics table

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075	-	1.90	-
G	0.037	-	0.95	-
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)