CMPZDA2V4 THRU CMPZDA47V

SURFACE MOUNT
DUAL, COMMON ANODE
SILICON ZENER DIODES
2.4 VOLTS THRU 47 VOLTS
350mW



SOT-23 CASE

Central Semiconductor Corp.

www.centralsemi.com

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°C)	**SYMBOL**		**UNITS**
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175	°C
Thermal Resistance	Θ_{JA}	429	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=0.9V MAX @ I_F=10mA (for all types)

TYPE	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}	ΘV_Z	
	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °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

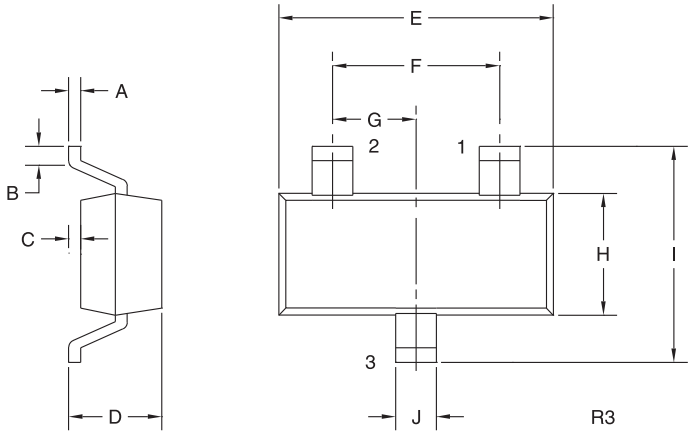
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ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C) V_F=0.9V MAX @ I_F=10mA (for all types)

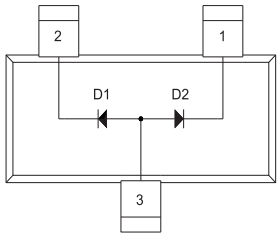
TYPE	ZENER VOLTAGE V_Z @ I_{ZT}		TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM ZENER VOLTAGE TEMP. COEFF.	MARKING CODE
	MIN	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @	I_{ZK}	I_R @	V_R	I_{ZM}	ΘV_Z	
	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °C	
CMPZDA24V	22.8	25.6	5.0	70	250	1.0	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



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)



LEAD CODE:
1) Cathode D2
2) Cathode D1
3) Anode D1, D2

MARKING CODE:
SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE

R8 (3-February 2010)