

**CMSZDA3V0
THRU
CMSZDA33V**

**DUAL ZENER DIODE
3.0 VOLTS THRU 33 VOLTS**

SUPERmini™



SOT-323 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSZDA3V0 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.

ABSOLUTE MAXIMUM RATINGS:

Power Dissipation (@T_A=25°C)
Operating and Storage Temperature
Thermal Resistance

SYMBOL

P_D 250
T_J, T_{stg} -65 to +150
Θ_{JA} 500

UNIT

mW
°C
°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C), V_F=0.9V MAX @ I_F=10mA FOR ALL TYPES

TYPE NO.	ZENER VOLTAGE V _Z @ I _{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER VOLTAGE TEMPERATURE COEFFICIENT	MARKING CODE
	MIN	NOM	MAX	I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _R @V _R			ΘV _Z	
	VOLTS	VOLTS	VOLTS	mA	Ω	Ω	mA	μA	VOLTS	%/°C	
CMSZDA3V0	2.8	3.0	3.2	5.0	95	600	1.0	10	1.0	-0.07	W5W
CMSZDA3V3	3.1	3.3	3.5	5.0	95	600	1.0	5	1.0	-0.07	W6W
CMSZDA3V6	3.4	3.6	3.8	5.0	95	600	1.0	2.0	1.0	-0.06	W7W
CMSZDA3V9	3.7	3.9	4.1	5.0	90	600	1.0	2.0	1.0	-0.06	W8W
CMSZDA4V3	4.0	4.3	4.6	5.0	90	600	1.0	1.0	1.0	-0.05	W9W
CMSZDA4V7	4.4	4.7	5.0	5.0	80	500	1.0	3.0	2.0	-0.03	Z1Z
CMSZDA5V1	4.8	5.1	5.4	5.0	60	480	1.0	2.0	2.0	0.02	Z2Z
CMSZDA5V6	5.2	5.6	6.0	5.0	40	400	1.0	1.0	2.0	0.03	Z3Z
CMSZDA6V2	5.8	6.2	6.6	5.0	10	150	1.0	3.0	4.0	0.04	Z4Z
CMSZDA6V8	6.4	6.8	7.2	5.0	15	80	1.0	2.0	4.0	0.05	Z5Z
CMSZDA7V5	7.0	7.5	7.9	5.0	15	80	1.0	1.0	5.0	0.05	Z6Z
CMSZDA8V2	7.7	8.2	8.7	5.0	15	80	1.0	0.7	5.0	0.06	Z7Z
CMSZDA9V1	8.5	9.1	9.6	5.0	15	100	1.0	0.5	6.0	0.06	Z8Z
CMSZDA10V	9.4	10	10.6	5.0	20	150	1.0	0.2	7.0	0.07	Z9Z
CMSZDA11V	10.4	11	11.6	5.0	20	150	1.0	0.1	8.0	0.07	Y1Y
CMSZDA12V	11.4	12	12.7	5.0	25	150	1.0	0.1	8.0	0.07	Y2Y
CMSZDA13V	12.4	13	14.1	5.0	30	170	1.0	0.1	8.0	0.08	Y3Y
CMSZDA15V	13.8	15	15.6	5.0	30	200	1.0	0.05	10.5	0.08	Y4Y
CMSZDA16V	15.3	16	17.1	5.0	40	200	1.0	0.05	11.2	0.08	Y5Y

R1 (04-April 2002)

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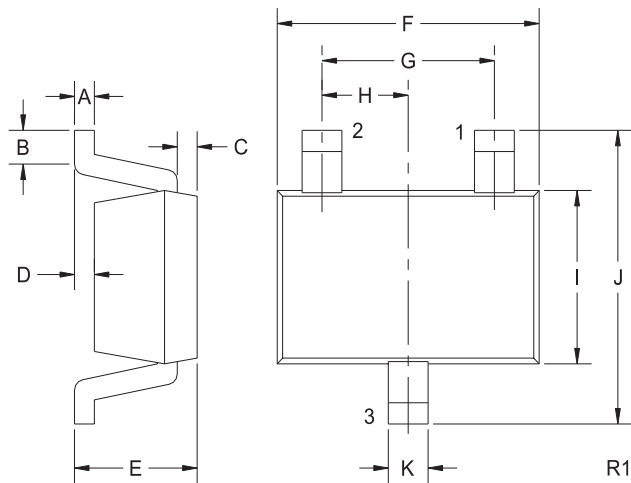
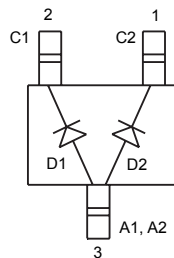
ELECTRICAL CHARACTERISTICS: (Continued)

TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER VOLTAGE TEMPERATURE COEFFICIENT	MARKING CODE
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$			θV_Z	
	VOLTS	VOLTS	VOLTS	mA	Ω	Ω	μA	VOLTS		%/°C	
CMSZDA18V	16.8	18	19.1	5.0	45	225	1.0	0.05	12.6	0.08	Y6Y
CMSZDA20V	18.8	20	21.2	5.0	55	225	1.0	0.05	14.0	0.08	Y7Y
CMSZDA22V	20.8	22	23.3	5.0	55	250	1.0	0.05	15.4	0.09	Y8Y
CMSZDA24V	22.8	24	25.6	5.0	70	250	1.0	0.05	16.8	0.09	Y9Y
CMSZDA27V	25.1	27	28.9	2.0	80	300	0.5	0.05	18.9	0.09	10W
CMSZDA30V	28.0	30	32.0	2.0	80	300	0.5	0.05	21.0	0.09	11W
CMSZDA33V	31.0	33	35.0	2.0	80	325	0.5	0.05	23.1	0.09	12W

SOT-323 - MECHANICAL OUTLINE

SYMBOL	DIMENSIONS		MIN	MAX
	INCHES	MILLIMETERS		
A	0.004	0.008	0.10	0.20
B	0.004	-	0.10	-
C	0.004	0.008	0.10	0.20
D	-	0.004	-	0.10
E	0.031	0.043	0.80	1.10
F	0.071	0.087	1.80	2.20
G	0.051	-	1.30	-
H	0.026	-	0.65	-
I	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R1)



LEAD CODE:

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

R1 (04-April 2002)