

**CMPZ4099
THRU
CMPZ4124**

**LOW NOISE ZENER DIODE
6.8 VOLTS THRU 43 VOLTS
350mW, 5% TOLERANCE**



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION

The CENTRAL SEMICONDUCTOR CMPZ4099 Series types are high quality Silicon Zener Diodes designed for low leakage, low current and low noise applications.

NOTE: For lower voltage devices, see CMPZ4614 series.

MAXIMUM RATINGS

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

SYMBOL

P_D 350
T_J, T_{stg} -65 to +150

UNIT

mW
°C

ELECTRICAL CHARACTERISTICS (T_A=25°C) V_F=1.0V MAX @ I_F=200mA FOR ALL TYPES

TYPE	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDENCE	MAX REVERSE LEAKAGE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY
	V _Z @I _{ZT}			I _{ZT}	Z _{VT} @I _{ZT}	I _R @V _R		I _{ZM}	N _D @I _{ZT}
	MIN	NOM	MAX						
	VOLTS	VOLTS	VOLTS	μA	Ω	μA	VOLTS	mA	μV/√Hz
CMPZ4099*	6.460	6.8	7.140	250	200	10	5.2	35.0	40
CMPZ4100*	7.125	7.5	7.865	250	200	10	5.7	31.8	40
CMPZ4101*	7.790	8.2	8.610	250	200	1.0	6.3	29.0	40
CMPZ4102*	8.265	8.7	9.135	250	200	1.0	6.7	27.4	40
CMPZ4103*	8.645	9.1	9.555	250	200	1.0	7.0	26.2	40
CMPZ4104*	9.500	10	10.50	250	200	1.0	7.6	24.8	40
CMPZ4105*	10.45	11	11.55	250	200	0.05	8.5	21.6	40
CMPZ4106*	11.40	12	12.60	250	200	0.05	9.2	20.4	40
CMPZ4107*	12.35	13	13.65	250	200	0.05	9.9	19.0	40
CMPZ4108*	13.30	14	14.70	250	200	0.05	10.7	17.5	40
CMPZ4109*	14.25	15	15.75	250	100	0.05	11.4	16.3	40
CMPZ4110*	15.20	16	16.80	250	100	0.05	12.2	15.4	40
CMPZ4111*	16.15	17	17.85	250	100	0.05	13.0	14.5	40
CMPZ4112*	17.10	18	18.90	250	100	0.05	13.7	13.2	40
CMPZ4113*	18.05	19	19.95	250	150	0.05	14.5	12.5	40
CMPZ4114*	19.00	20	21.00	250	150	0.01	15.2	11.9	40
CMPZ4115*	20.90	22	23.10	250	150	0.01	16.8	10.8	40
CMPZ4116*	22.80	24	25.20	250	150	0.01	18.3	9.9	40

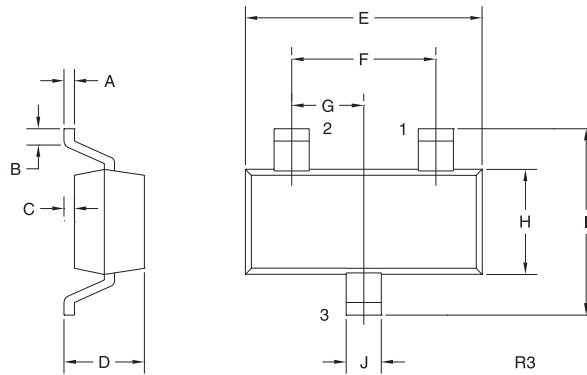
* Available on special order only, please consult factory.

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$), $V_F=1.0\text{V MAX @ } I_F = 200\text{mA}$ FOR ALL TYPES.

TYPE	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDENCE	MAX REVERSE LEAKAGE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY
	$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$I_R@V_R$		I_{ZM}	$N_D@I_{ZT}$
	MIN	NOM	MAX						
	VOLTS	VOLTS	VOLTS	μA	Ω	μA	VOLTS	mA	$\mu\text{V}/\sqrt{\text{Hz}}$
CMPZ4117*	23.75	25	26.25	250	150	0.01	19.0	9.5	40
CMPZ4118*	25.65	27	28.35	250	150	0.01	20.5	8.8	40
CMPZ4119*	26.60	28	29.40	250	200	0.01	21.3	8.5	40
CMPZ4120*	28.50	30	31.50	250	200	0.01	22.8	7.9	40
CMPZ4121*	31.35	33	34.65	250	200	0.01	25.1	7.2	40
CMPZ4122*	34.20	36	37.80	250	200	0.01	27.4	6.6	40
CMPZ4123*	37.05	39	40.95	250	200	0.01	29.7	6.1	40
CMPZ4124*	40.85	43	45.15	250	250	0.01	32.7	5.5	40

* Available on special order only, please consult factory.

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) ANODE
- 2) NO CONNECTION
- 3) CATHODE

SYMBOL	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)

R3 (28-Mar 2001)