

**CMHZ4099  
THRU  
CMHZ4125**

**LOW NOISE ZENER DIODE  
6.8 VOLTS THRU 47 VOLTS  
500mW, 5% TOLERANCE**



**SOD-123 CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHZ4099 Series types are high quality Silicon Zener Diodes designed for low leakage, low current and low noise applications.

**MAXIMUM RATINGS:**

Power Dissipation (@ $T_A=25^\circ\text{C}$ )  
Operating and Storage Temperature

**SYMBOL**

$P_D$  500  
 $T_J, T_{stg}$  -65 to +200

**UNIT**

mW  
 $^\circ\text{C}$

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

TYPE NO.	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAX REVERSE LEAKAGE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY	MARKING CODE
	$V_Z @ I_{ZT}$			$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		$I_{ZM}$	$N_D @ I_{ZT}$	
	MIN	NOM	MAX							
	VOLTS	VOLTS	VOLTS	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	VOLTS	mA	$\sqrt{\mu\text{V/Hz}}$	
CMHZ4099*	6.460	6.8	7.140	250	200	10	5.2	35.0	40	CHX
CMHZ4100*	7.125	7.5	7.865	250	200	10	5.7	31.8	40	CHY
CMHZ4101*	7.790	8.2	8.610	250	200	1.0	6.3	29.0	40	CHZ
CMHZ4102*	8.265	8.7	9.135	250	200	1.0	6.7	27.4	40	CJC
CMHZ4103*	8.645	9.1	9.555	250	200	1.0	7.0	26.2	40	CJD
CMHZ4104*	9.500	10	10.50	250	200	1.0	7.6	24.8	40	CJE
CMHZ4105*	10.45	11	11.55	250	200	0.05	8.5	21.6	40	CJF
CMHZ4106*	11.40	12	12.60	250	200	0.05	9.2	20.4	40	CJH
CMHZ4107*	12.35	13	13.65	250	200	0.05	9.9	19.0	40	CJJ
CMHZ4108*	13.30	14	14.70	250	200	0.05	10.7	17.5	40	CJK
CMHZ4109*	14.25	15	15.75	250	100	0.05	11.4	16.3	40	CJM
CMHZ4110*	15.20	16	16.80	250	100	0.05	12.2	15.4	40	CJN
CMHZ4111*	16.15	17	17.85	250	100	0.05	13.0	14.5	40	CJP
CMHZ4112*	17.10	18	18.90	250	100	0.05	13.7	13.2	40	CJT
CMHZ4113*	18.05	19	19.95	250	150	0.05	14.5	12.5	40	CJU
CMHZ4114*	19.00	20	21.00	250	150	0.01	15.2	11.9	40	CJV
CMHZ4115*	20.90	22	23.10	250	150	0.01	16.8	10.8	40	CJA

\* Available on special order only, please consult factory

R0 ( 29-August 2001)

LOW NOISE ZENER DIODE  
6.8 VOLTS THRU 47 VOLTS  
500mW, 5% TOLERANCE

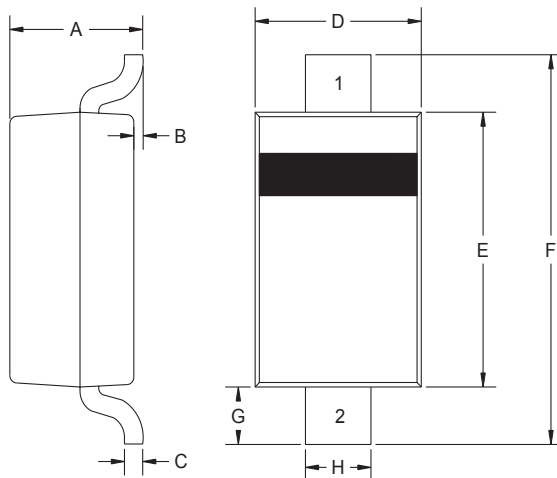
**ELECTRICAL CHARACTERISTICS:**

( $T_A=25^{\circ}C$ )  $V_F=1.0V$  MAX @  $I_F=200mA$  FOR ALL TYPES)

TYPE NO.	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAX REVERSE LEAKAGE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY	MARKING CODE
	$V_Z @ I_{ZT}$			$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		$I_{ZM}$	$N_D @ I_{ZT}$	
	MIN	NOM	MAX							
	VOLTS	VOLTS	VOLTS	$\mu A$	$\Omega$	$\mu A$	VOLTS	mA	$\sqrt{\mu V/Hz}$	
CMHZ4116*	22.80	24	25.20	250	150	0.01	18.3	9.9	40	CJZ
CMHZ4117*	23.75	25	26.25	250	150	0.01	19.0	9.5	40	CJY
CMHZ4118*	25.65	27	28.35	250	150	0.01	20.5	8.8	40	CKA
CMHZ4119*	26.60	28	29.40	250	200	0.01	21.3	8.5	40	CKC
CMHZ4120*	28.50	30	31.50	250	200	0.01	22.8	7.9	40	CKD
CMHZ4121*	31.35	33	34.65	250	200	0.01	25.1	7.2	40	CKE
CMHZ4122*	34.20	36	37.80	250	200	0.01	27.4	6.6	40	CKF
CMHZ4123*	37.05	39	40.95	250	200	0.01	29.7	6.1	40	CKH
CMHZ4124*	40.85	43	45.15	250	250	0.01	32.7	5.5	40	CKJ
CMHZ4125*	44.65	47	49.35	250	250	0.01	35.8	5.1	40	CKL

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**SOD-123 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	-	0.005	-	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.112	2.50	2.84
F	0.140	0.154	3.55	3.90
G	0.010	-	0.25	-
H	0.020	0.028	0.50	0.70

SOD-123 (REV:R3)

**Lead Code:**

- 1) Cathode
- 2) Anode

R3

R0 ( 29-August 2001)