

CMHZ4099 THRU CMHZ4125

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

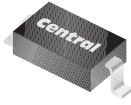


www.centrasemi.com

**DESCRIPTION:**

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

**MARKING CODE: SEE MARKING CODE ON ELECTRICAL CHARACTERISTIC TABLE**



SOD-123 CASE

**MAXIMUM RATINGS:**

Power Dissipation (@ $T_L=75^\circ\text{C}$ )  
Operating and Storage Junction Temperature

**SYMBOL**

$P_D$   
 $T_J, T_{stg}$

**UNIT**

500 mW  
-65 to +150  $^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$  (for all types)

TYPE	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							
	V	V	V	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	V	mA	$\mu\text{V}/\sqrt{\text{Hz}}$	
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

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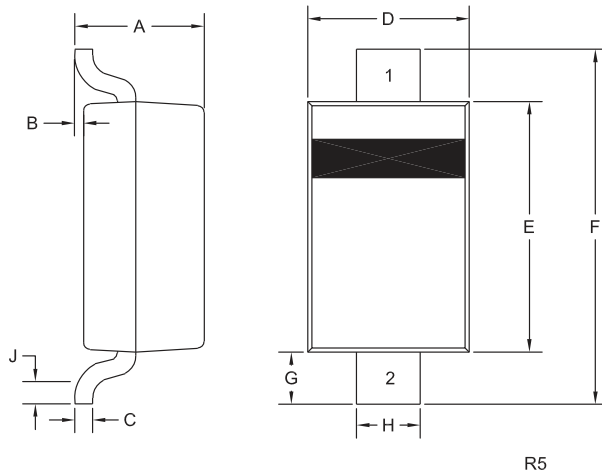
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TYPE	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAX REVERSE LEAKAGE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY	MARKING CODE
	$V_Z @ I_{ZT}$			$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		$I_{ZM}$	$N_D @ I_{ZT}$	
	MIN	NOM	MAX							
	V	V	V	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	V	mA	$\mu\text{V}/\sqrt{\text{Hz}}$	
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

**SOD-123 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	0.000	0.005	0.00	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.110	2.50	2.80
F	0.142	0.154	3.60	3.90
G	0.016	-	0.40	-
H	0.020	0.028	0.50	0.70
J	0.010	-	0.25	-

SOD-123 (REV:R5)

**LEAD CODE**

- 1) Cathode
- 2) Anode

R5

R5 (12-August 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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