

CMHZ4614 THRU CMHZ4627

**SURFACE MOUNT  
LOW NOISE SILICON ZENER DIODE  
1.8 VOLTS THRU 6.2 VOLTS  
500mW, 5% TOLERANCE**

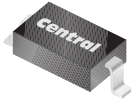


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**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHZ4614 Series Silicon Zener Diode is a high quality voltage regulator designed for low leakage, low current and low noise applications.

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



**SOD-123 CASE**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

	SYMBOL		UNITS
Power Dissipation (@ $T_L=75^\circ\text{C}$ )	$P_D$	500	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$	150	$^\circ\text{C/W}$
Thermal Resistance (Note 1)	$\theta_{JA}$	312.5	$^\circ\text{C/W}$

**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 $V_Z @ I_{ZT}$			TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $I_{ZM}$	MAXIMUM NOISE DENSITY $N_D @ I_{ZT}$	MARKING CODE
	MIN	NOM	MAX			$\mu\text{A}$	$\Omega$			
	V	V	V	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	V	mA	$\mu\text{V}/\sqrt{\text{Hz}}$	
CMHZ4614	1.710	1.8	1.890	250	1200	7.5	1.0	120	1.0	CHC
CMHZ4615	1.900	2.0	2.100	250	1250	5.0	1.0	110	1.0	CHD
CMHZ4616	2.090	2.2	2.310	250	1300	4.0	1.0	100	1.0	CHE
CMHZ4617	2.280	2.4	2.520	250	1400	2.0	1.0	95	1.0	CHF
CMHZ4618	2.565	2.7	2.835	250	1500	1.0	1.0	90	1.0	CHH
CMHZ4619	2.850	3.0	3.150	250	1600	0.8	1.0	85	1.0	CHJ
CMHZ4620	3.135	3.3	3.465	250	1650	7.5	1.5	80	1.0	CHK
CMHZ4621	3.420	3.6	3.780	250	1700	7.5	2.0	75	1.0	CHM
CMHZ4622	3.705	3.9	4.095	250	1650	5.0	2.0	70	1.0	CHN
CMHZ4623	4.085	4.3	4.515	250	1600	4.0	2.0	65	1.0	CHP
CMHZ4624	4.465	4.7	4.935	250	1550	10	3.0	60	1.0	CHT
CMHZ4625	4.845	5.1	5.355	250	1500	10	3.0	55	2.0	CHU
CMHZ4626	5.320	5.6	5.880	250	1400	10	4.0	50	4.0	CHV
CMHZ4627	5.890	6.2	6.510	250	1200	10	5.0	45	5.0	CHA

Notes: (1) FR-4 Epoxy PC Board with copper mounting pad area of 2.2mm<sup>2</sup>

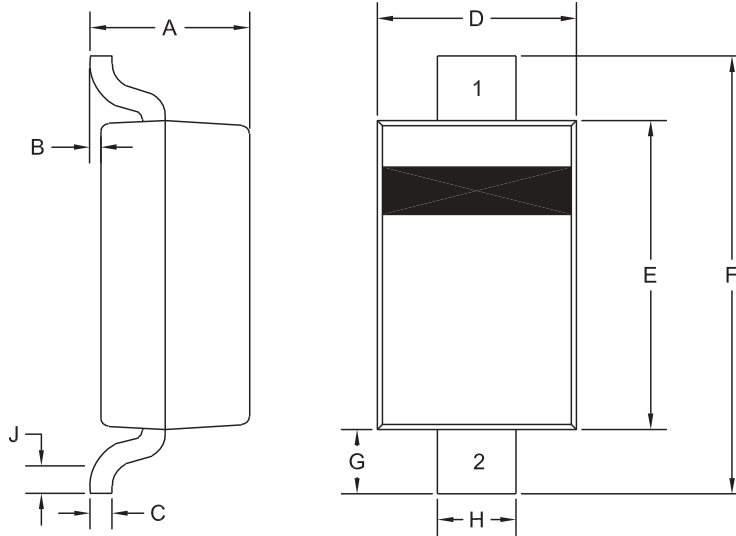
R4 (12-August 2010)

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SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE:  
1) Cathode  
2) Anode

DIMENSIONS				
SYMBOL	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)

R4 (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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