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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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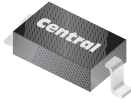
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CMHZ5221B THRU CMHZ5267B

**SURFACE MOUNT  
SILICON ZENER DIODE  
2.4 VOLTS THRU 75 VOLTS  
500mW, 5% TOLERANCE**



SOD-123 CASE



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHZ5221B Series Silicon Zener Diode is a high quality voltage regulator, manufactured in a surface mount package, designed for use in industrial, commercial, entertainment and computer applications.

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

**MAXIMUM RATINGS:**

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

**SYMBOL**

$P_D$  500  
 $T_J$  +150  
 $T_{stg}$  -65 to +175  
 $\theta_{JL}$  150

**UNIT**

mW  
 $^\circ\text{C}$   
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS: ( $T_A=25^\circ\text{C}$ ),  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  (for all types)**

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF.	MARKING CODE
	MIN	NOM	MAX		$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$\theta_{VZ}$		
	V	V	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	%/ $^\circ\text{C}$	
CMHZ5221B	2.280	2.4	2.520	20	30	1200	0.25	100	1.0	-0.085	CC1
CMHZ5222B	2.375	2.5	2.625	20	30	1250	0.25	100	1.0	-0.085	CC2
CMHZ5223B	2.565	2.7	2.835	20	30	1300	0.25	75	1.0	-0.080	CC3
CMHZ5224B	2.660	2.8	2.940	20	30	1400	0.25	75	1.0	-0.080	CC4
CMHZ5225B	2.850	3.0	3.150	20	30	1600	0.25	50	1.0	-0.075	CC5
CMHZ5226B	3.135	3.3	3.465	20	28	1600	0.25	25	1.0	-0.070	CD1
CMHZ5227B	3.420	3.6	3.780	20	24	1700	0.25	15	1.0	-0.065	CD2
CMHZ5228B	3.705	3.9	4.095	20	23	1900	0.25	10	1.0	-0.060	CD3
CMHZ5229B	4.085	4.3	4.515	20	22	2000	0.25	5.0	1.0	$\pm 0.055$	CD4
CMHZ5230B	4.465	4.7	4.935	20	19	1900	0.25	5.0	2.0	$\pm 0.030$	CD5
CMHZ5231B	4.845	5.1	5.355	20	17	1600	0.25	5.0	2.0	$\pm 0.030$	CE1
CMHZ5232B	5.320	5.6	5.880	20	11	1600	0.25	5.0	3.0	+0.038	CE2
CMHZ5233B	5.700	6.0	6.300	20	7.0	1600	0.25	5.0	3.5	+0.038	CE3
CMHZ5234B	5.890	6.2	6.510	20	7.0	1000	0.25	5.0	4.0	+0.045	CE4
CMHZ5235B	6.460	6.8	7.140	20	5.0	750	0.25	3.0	5.0	+0.050	CE5
CMHZ5236B	7.125	7.5	7.875	20	6.0	500	0.25	3.0	6.0	+0.058	CF1
CMHZ5237B	7.790	8.2	8.610	20	8.0	500	0.25	3.0	6.5	+0.062	CF2
CMHZ5238B	8.265	8.7	9.135	20	8.0	600	0.25	3.0	6.5	+0.065	CF3
CMHZ5239B	8.645	9.1	9.555	20	10	600	0.25	3.0	7.0	+0.068	CF4
CMHZ5240B	9.500	10	10.50	20	17	600	0.25	3.0	8.0	+0.075	CF5
CMHZ5241B	10.45	11	11.55	20	22	600	0.25	2.0	8.4	+0.076	CH1
CMHZ5242B	11.40	12	12.60	20	30	600	0.25	1.0	9.1	+0.077	CH2
CMHZ5243B	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9	+0.079	CH3
CMHZ5244B	13.30	14	14.70	9.0	15	600	0.25	0.1	10	+0.082	CH4
CMHZ5245B	14.25	15	15.75	8.5	16	600	0.25	0.1	11	+0.082	CH5
CMHZ5246B	15.20	16	16.80	7.8	17	600	0.25	0.1	12	+0.083	CJ1
CMHZ5247B	16.15	17	17.85	7.4	19	600	0.25	0.1	13	+0.084	CJ2
CMHZ5248B	17.10	18	18.90	7.0	21	600	0.25	0.1	14	+0.085	CJ3
CMHZ5249B	18.05	19	19.95	6.6	23	600	0.25	0.1	14	+0.086	CJ4
CMHZ5250B	19.00	20	21.00	6.2	25	600	0.25	0.1	15	+0.086	CJ5
CMHZ5251B	20.90	22	23.10	5.6	29	600	0.25	0.1	17	+0.087	CK1
CMHZ5252B	22.80	24	25.20	5.2	33	600	0.25	0.1	18	+0.087	CK2
CMHZ5253B	23.75	25	26.25	5.0	35	600	0.25	0.1	19	+0.089	CK3

R9 (12-August 2010)

CMHZ5221B THRU CMHZ5267B

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SILICON ZENER DIODE  
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500mW, 5% TOLERANCE**

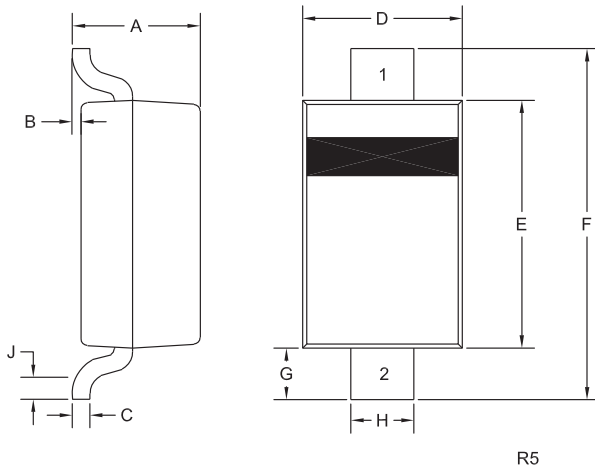


**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ ),  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF. $\theta V_Z$	MARKING CODE
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$V_R$			
	V	V	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	%/°C	
CMHZ5254B	25.65	27	28.35	4.6	41	600	0.25	0.1	21	+0.090	CK4
CMHZ5255B	26.60	28	29.40	4.5	44	600	0.25	0.1	21	+0.091	CK5
CMHZ5256B	28.50	30	31.50	4.2	49	600	0.25	0.1	23	+0.091	CM1
CMHZ5257B	31.35	33	34.65	3.8	58	700	0.25	0.1	25	+0.092	CM2
CMHZ5258B	34.20	36	37.80	3.4	70	700	0.25	0.1	27	+0.093	CM3
CMHZ5259B	37.05	39	40.95	3.2	80	800	0.25	0.1	30	+0.094	CM4
CMHZ5260B	40.85	43	45.15	3.0	93	900	0.25	0.1	33	+0.095	CM5
CMHZ5261B	44.65	47	49.35	2.7	105	1000	0.25	0.1	36	+0.095	CN1
CMHZ5262B	48.45	51	53.55	2.5	125	1100	0.25	0.1	39	+0.096	CN2
CMHZ5263B	53.20	56	58.80	2.2	150	1300	0.25	0.1	43	+0.096	CN3
CMHZ5264B	57.00	60	63.00	2.1	170	1400	0.25	0.1	46	+0.097	CN4
CMHZ5265B	58.90	62	65.10	2.0	185	1400	0.25	0.1	47	+0.097	CN5
CMHZ5266B	64.60	68	71.40	1.8	230	1600	0.25	0.1	52	+0.097	CP1
CMHZ5267B	71.25	75	78.75	1.7	270	1700	0.25	0.1	56	+0.098	CP2

Higher Zener voltages may be available upon request. Please consult factory.

**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

R9 (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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