



**CMSZ5221B  
THRU  
CMSZ5261B**

**250 mW ZENER DIODE  
5% TOLERANCE**

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSZ5221B Series Silicon Zener Diode is a high quality voltage regulator for use in industrial, commercial, entertainment and computer applications. Higher voltage devices are available on special order.




**SOT-323 CASE**

**ABSOLUTE MAXIMUM RATINGS**

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

**SYMBOL**

$P_D$	250	mW
$T_J, T_{stg}$	-65 to + 175	$^{\circ}\text{C}$
$\Theta_{JA}$	500	$^{\circ}\text{C/W}$

**UNITS**

**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			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF.	MARKING CODE	
	$V_Z @ I_{ZT}$				$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$				$\ominus V_Z$
	MIN VOLTS	NOM VOLTS	MAX VOLTS					$\mu\text{A}$	VOLTS			
CMSZ5221B	2.280	2.4	2.520	20	30	1200	0.25	100	1.0	-0.085	8A1	
CMSZ5222B	2.375	2.5	2.625	20	30	1250	0.25	100	1.0	-0.085	8B1	
CMSZ5223B	2.565	2.7	2.835	20	30	1300	0.25	75	1.0	-0.080	8C1	
CMSZ5224B	2.660	2.8	2.940	20	30	1400	0.25	75	1.0	-0.080	8D1	
CMSZ5225B	2.850	3.0	3.150	20	29	1600	0.25	50	1.0	-0.075	8E1	
CMSZ5226B	3.135	3.3	3.465	20	28	1600	0.25	25	1.0	-0.070	8AC	
CMSZ5227B	3.420	3.6	3.780	20	24	1700	0.25	15	1.0	-0.065	8BC	
CMSZ5228B	3.705	3.9	4.095	20	23	1900	0.25	10	1.0	-0.060	8CC	
CMSZ5229B	4.085	4.3	4.515	20	22	2000	0.25	5.0	1.0	$\pm 0.055$	8DC	
CMSZ5230B	4.465	4.7	4.935	20	19	1900	0.25	5.0	2.0	$\pm 0.030$	8EC	
CMSZ5231B	4.845	5.1	5.355	20	17	1600	0.25	5.0	2.0	$\pm 0.030$	8FC	
CMSZ5232B	5.320	5.6	5.880	20	11	1600	0.25	5.0	3.0	+0.038	8GC	
CMSZ5233B	5.700	6.0	6.300	20	7.0	1600	0.25	5.0	3.5	+0.038	8HC	
CMSZ5234B	5.890	6.2	6.510	20	7.0	1000	0.25	5.0	4.0	+0.045	8JC	
CMSZ5235B	6.460	6.8	7.140	20	5.0	750	0.25	3.0	5.0	+0.050	8KC	
CMSZ5236B	7.125	7.5	7.875	20	6.0	500	0.25	3.0	6.0	+0.058	8LC	
CMSZ5237B	7.790	8.2	8.610	20	8.0	500	0.25	3.0	6.5	+0.062	8MC	
CMSZ5238B	8.265	8.7	9.135	20	8.0	600	0.25	3.0	6.5	+0.065	8NC	
CMSZ5239B	8.645	9.1	9.555	20	10	600	0.25	3.0	7.0	+0.068	8PC	
CMSZ5240B	9.500	10	10.50	20	17	600	0.25	3.0	8.0	+0.075	8QC	
CMSZ5241B	10.45	11	11.55	20	22	600	0.25	2.0	8.4	+0.076	8RC	
CMSZ5242B	11.40	12	12.60	20	30	600	0.25	1.0	9.1	+0.077	8SC	
CMSZ5243B	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9	+0.079	8TC	
CMSZ5244B	13.30	14	14.70	9.0	15	600	0.25	0.1	10	+0.082	8UC	

TYPE	ZENER VOLTAGE			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF.	MARKING CODE
	$V_Z @ I_{ZT}$				$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$			
	MIN VOLTS	NOM VOLTS	MAX VOLTS	mA				$\Omega$	$\Omega$	$\mu A$	
CMSZ5245B	14.25	15	15.75	8.5	16	600	0.25	0.1	11	+0.082	8VC
CMSZ5246B	15.20	16	16.80	7.8	17	600	0.25	0.1	12	+0.083	8WC
CMSZ5247B	16.15	17	17.85	7.4	19	600	0.25	0.1	13	+0.084	8XC
CMSZ5248B	17.10	18	18.90	7.0	21	600	0.25	0.1	14	+0.085	8YC
CMSZ5249B	18.05	19	19.95	6.6	23	600	0.25	0.1	14	+0.086	8ZC
CMSZ5250B	19.00	20	21.00	6.2	25	600	0.25	0.1	15	+0.086	1A8
CMSZ5251B	20.90	22	23.10	5.6	29	600	0.25	0.1	17	+0.087	1B8
CMSZ5252B	22.80	24	25.20	5.2	33	600	0.25	0.1	18	+0.088	1C8
CMSZ5253B	23.75	25	26.25	5.0	35	600	0.25	0.1	19	+0.089	1D8
CMSZ5254B	25.65	27	28.35	4.6	41	600	0.25	0.1	21	+0.090	1E8
CMSZ5255B	26.60	28	29.40	4.5	44	600	0.25	0.1	21	+0.091	1F8
CMSZ5256B	28.50	30	31.50	4.2	49	600	0.25	0.1	23	+0.091	1G8
CMSZ5257B	31.35	33	34.65	3.8	58	700	0.25	0.1	25	+0.092	1H8
CMSZ5258B	34.20	36	37.80	3.4	70	700	0.25	0.1	27	+0.093	1J8
CMSZ5259B	37.05	39	40.95	3.2	80	800	0.25	0.1	30	+0.094	1K8
CMSZ5260B	40.85	43	45.15	3.0	93	900	0.25	0.1	33	+0.095	1L8
CMSZ5261B	44.65	47	49.35	2.7	105	1000	0.25	0.1	36	+0.095	1M8

All dimensions in inches (mm).

