1N5221B THRU 1N5281B

SILICON ZENER DIODE
2.4 VOLTS THRU 200 VOLTS
500mW, 5% TOLERANCE

DO-35 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N5221B Series Silicon Zener Diode is a high quality voltage regulator designed for use in industrial, commercial, entertainment and computer applications.

MAXIMUM RATINGS: (T_L=75°C)	**SYMBOL**		**UNITS**
Power Dissipation	P_D	500	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200	°C
V_Z Tolerance: Part number with “B” suffix		±5	%
V_Z Tolerance: Part number with “C” suffix		±2	%
V_Z Tolerance: Part number with “D” suffix		±1	%

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=1.1V MAX @ I_F=200mA (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R @ V_R		ΘV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	%/°C
1N5221B	2.280	2.4	2.520	20	30	1200	0.25	100	1.0	-0.085
1N5222B	2.375	2.5	2.625	20	30	1250	0.25	100	1.0	-0.085
1N5223B	2.565	2.7	2.835	20	30	1300	0.25	75	1.0	-0.080
1N5224B	2.660	2.8	2.940	20	30	1400	0.25	75	1.0	-0.080
1N5225B	2.850	3.0	3.150	20	29	1600	0.25	50	1.0	-0.075
1N5226B	3.135	3.3	3.465	20	28	1600	0.25	25	1.0	-0.070
1N5227B	3.420	3.6	3.780	20	24	1700	0.25	15	1.0	-0.065
1N5228B	3.705	3.9	4.095	20	23	1900	0.25	10	1.0	-0.060
1N5229B	4.085	4.3	4.515	20	22	2000	0.25	5.0	1.0	±0.055
1N5230B	4.465	4.7	4.935	20	19	1900	0.25	5.0	2.0	±0.030
1N5231B	4.845	5.1	5.355	20	17	1600	0.25	5.0	2.0	±0.030
1N5232B	5.320	5.6	5.880	20	11	1600	0.25	5.0	3.0	+0.038
1N5233B	5.700	6.0	6.300	20	7.0	1600	0.25	5.0	3.5	+0.038
1N5234B	5.890	6.2	6.510	20	7.0	1000	0.25	5.0	4.0	+0.045
1N5235B	6.460	6.8	7.140	20	5.0	750	0.25	3.0	5.0	+0.050
1N5236B	7.125	7.5	7.875	20	6.0	500	0.25	3.0	6.0	+0.058
1N5237B	7.790	8.2	8.610	20	8.0	500	0.25	3.0	6.5	+0.062
1N5238B	8.265	8.7	9.135	20	8.0	600	0.25	3.0	6.5	+0.065
1N5239B	8.645	9.1	9.555	20	10	600	0.25	3.0	7.0	+0.068
1N5240B	9.500	10	10.50	20	17	600	0.25	3.0	8.0	+0.075
1N5241B	10.45	11	11.55	20	22	600	0.25	2.0	8.4	+0.076
1N5242B	11.40	12	12.60	20	30	600	0.25	1.0	9.1	+0.077
1N5243B	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9	+0.079
1N5244B	13.30	14	14.70	9.0	15	600	0.25	0.1	10	+0.082
1N5245B	14.25	15	15.75	8.5	16	600	0.25	0.1	11	+0.082
1N5246B	15.20	16	16.80	7.8	17	600	0.25	0.1	12	+0.083

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500mW, 5% TOLERANCE

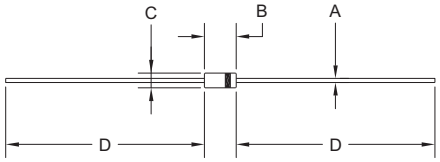
ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C) V_F=1.1V MAX @ I_F=200mA (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R @ V_R		ΘV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	%/°C
1N5247B	16.15	17	17.85	7.4	19	600	0.25	0.1	13	+0.084
1N5248B	17.10	18	18.90	7.0	21	600	0.25	0.1	14	+0.085
1N5249B	18.05	19	19.95	6.6	23	600	0.25	0.1	14	+0.086
1N5250B	19.00	20	21.00	6.2	25	600	0.25	0.1	15	+0.086
1N5251B	20.90	22	23.10	5.6	29	600	0.25	0.1	17	+0.087
1N5252B	22.80	24	25.20	5.2	33	600	0.25	0.1	18	+0.088
1N5253B	23.75	25	26.25	5.0	35	600	0.25	0.1	19	+0.089
1N5254B	25.65	27	28.35	4.6	41	600	0.25	0.1	21	+0.090
1N5255B	26.60	28	29.40	4.5	44	600	0.25	0.1	21	+0.091
1N5256B	28.50	30	31.50	4.2	49	600	0.25	0.1	23	+0.091
1N5257B	31.35	33	34.65	3.8	58	700	0.25	0.1	25	+0.092
1N5258B	34.20	36	37.80	3.4	70	700	0.25	0.1	27	+0.093
1N5259B	37.05	39	40.95	3.2	80	800	0.25	0.1	30	+0.094
1N5260B	40.85	43	45.15	3.0	93	900	0.25	0.1	33	+0.095
1N5261B	44.65	47	49.35	2.7	105	1000	0.25	0.1	36	+0.095
1N5262B	48.45	51	53.55	2.5	125	1100	0.25	0.1	39	+0.096
1N5263B	53.20	56	58.80	2.2	150	1300	0.25	0.1	43	+0.096
1N5264B	57.00	60	63.00	2.1	170	1400	0.25	0.1	46	+0.097
1N5265B	58.90	62	65.10	2.0	185	1400	0.25	0.1	47	+0.097
1N5266B	64.60	68	71.40	1.8	230	1600	0.25	0.1	52	+0.097
1N5267B	71.25	75	78.75	1.7	270	1700	0.25	0.1	56	+0.098
1N5268B	77.90	82	86.10	1.5	330	2000	0.25	0.1	62	+0.098
1N5269B	82.65	87	91.35	1.4	370	2200	0.25	0.1	68	+0.099
1N5270B	86.45	91	95.55	1.4	400	2300	0.25	0.1	69	+0.099
1N5271B	95.00	100	105.0	1.3	500	2600	0.25	0.1	76	+0.110
1N5272B	104.5	110	115.5	1.1	750	3000	0.25	0.1	84	+0.110
1N5273B	114.0	120	126.0	1.0	900	4000	0.25	0.1	91	+0.110
1N5274B	123.5	130	136.5	0.95	1100	4500	0.25	0.1	99	+0.110
1N5275B	133.0	140	147.0	0.90	1300	4500	0.25	0.1	106	+0.110
1N5276B	142.5	150	157.5	0.85	1500	5000	0.25	0.1	114	+0.110
1N5277B	152.0	160	168.0	0.80	1700	5500	0.25	0.1	122	+0.110
1N5278B	161.5	170	178.5	0.74	1900	5500	0.25	0.1	129	+0.110
1N5279B	171.0	180	189.0	0.68	2200	6000	0.25	0.1	137	+0.110
1N5280B	180.5	190	199.5	0.66	2400	6500	0.25	0.1	144	+0.110
1N5281B	190.0	200	210.0	0.65	2500	7000	0.25	0.1	152	+0.110

DO-35 CASE - MECHANICAL OUTLINE

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.018	0.022	0.46	0.56
B	0.120	0.200	3.05	5.08
C	0.060	0.090	1.52	2.29
D	1.000	-	25.40	-

DO-35 (REV: R1)



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