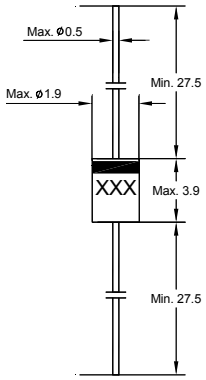
1N5220B-1N5267B

Silicon Planar Zener Diodes

Standard Zener voltage tolerance is ± 20%. Add suffix "A" for ± 10% Tolerance, suffix "B" for ± 5% tolerance, suffix "C" for ± 2% tolerance, Other tolerance, non standard and higher Zener voltages are upon request.



Glass Case DO-35
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 [1)]	mW
Junction Temperature	T_j	200	°C
Storage Temperature Range	T_{stg}	- 65 to + 200	°C

[1)] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 [1)]	K/mW
Forward Voltage at I_F = 200 mA	V_F	1.1	V

[1)] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

Characteristics at T_a = 25 °C

Type	Zener Voltage Range [1]				Dynamic Resistance			Reverse Current		Temp. Coefficient of Zener Voltage
	V_{Znom}	V_{ZT}		at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R	TK_{VZ}
	(V)	Min. (V)	Max. (V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	(V)	%/K
1N5220B	2.2	2.09	2.31	20	30	1150	0.25	100	1	<-0.085
1N5221B	2.4	2.28	2.52	20	30	1200	0.25	100	1	<-0.085
1N5222B	2.5	2.38	2.62	20	30	1250	0.25	100	1	<-0.085
1N5223B	2.7	2.57	2.83	20	30	1300	0.25	75	1	<-0.080
1N5224B	2.8	2.66	2.94	20	30	1400	0.25	75	1	<-0.080
1N5225B	3	2.85	3.15	20	29	1600	0.25	50	1	<-0.075
1N5226B	3.3	3.14	3.46	20	28	1600	0.25	25	1	<-0.070
1N5227B	3.6	3.42	3.78	20	24	1700	0.25	15	1	<-0.065
1N5228B	3.9	3.71	4.09	20	23	1900	0.25	10	1	<-0.060
1N5229B	4.3	4.09	4.51	20	22	2000	0.25	5	1	<-0.055
1N5230B	4.7	4.47	4.93	20	19	1900	0.25	5	2	<±0.030
1N5231B	5.1	4.85	5.35	20	17	1600	0.25	5	2	<±0.030
1N5232B	5.6	5.32	5.88	20	11	1600	0.25	5	3	<+0.038
1N5233B	6	5.7	6.3	20	7	1600	0.25	5	3.5	<+0.038
1N5234B	6.2	5.89	6.51	20	7	1000	0.25	5	4	<+0.045
1N5235B	6.8	6.46	7.14	20	5	750	0.25	3	5	<+0.050
1N5236B	7.5	7.13	7.87	20	6	500	0.25	3	6	<+0.058
1N5237B	8.2	7.79	8.61	20	8	500	0.25	3	6.5	<+0.062
1N5238B	8.7	8.27	9.13	20	8	600	0.25	3	6.5	<+0.065
1N5239B	9.1	8.65	9.55	20	10	600	0.25	3	7	<+0.068
1N5240B	10	9.5	10.5	20	17	600	0.25	3	8	<+0.075
1N5241B	11	10.45	11.55	20	22	600	0.25	2	8.4	<+0.076
1N5242B	12	11.4	12.6	20	30	600	0.25	1	9.1	<+0.077
1N5243B	13	12.35	13.65	9.5	13	600	0.25	0.5	9.9	<+0.079
1N5244B	14	13.3	14.7	9	15	600	0.25	0.1	10	<+0.082
1N5245B	15	14.25	15.75	8.5	16	600	0.25	0.1	11	<+0.082
1N5246B	16	15.2	16.8	7.8	17	600	0.25	0.1	12	<+0.083
1N5247B	17	16.15	17.85	7.4	19	600	0.25	0.1	13	<+0.084
1N5248B	18	17.1	18.9	7	21	600	0.25	0.1	14	<+0.085
1N5249B	19	18.05	19.95	6.6	23	600	0.25	0.1	14	<+0.086
1N5250B	20	19	21	6.2	25	600	0.25	0.1	15	<+0.086
1N5251B	22	20.9	23.1	5.6	29	600	0.25	0.1	17	<+0.087
1N5252B	24	22.8	25.2	5.2	33	600	0.25	0.1	18	<+0.088
1N5253B	25	23.75	26.25	5	35	600	0.25	0.1	19	<+0.089
1N5254B	27	25.65	28.35	4.6	41	600	0.25	0.1	21	<+0.090
1N5255B	28	26.6	29.4	4.5	44	600	0.25	0.1	21	<+0.091
1N5256B	30	28.5	31.5	4.2	49	600	0.25	0.1	23	<+0.091
1N5257B	33	31.35	34.65	3.8	58	700	0.25	0.1	25	<+0.092
1N5258B	36	34.2	37.8	3.4	70	700	0.25	0.1	27	<+0.093
1N5259B	39	37.05	40.95	3.2	80	800	0.25	0.1	30	<+0.094
1N5260B	43	40.85	45.15	3	93	900	0.25	0.1	33	<+0.095
1N5261B	47	44.65	49.35	2.7	105	1000	0.25	0.1	36	<+0.095
1N5262B	51	48.45	53.55	2.5	125	1100	0.25	0.1	39	<+0.096
1N5263B	56	53.2	58.8	2.2	150	1300	0.25	0.1	43	<+0.096
1N5264B	60	57	63	2.1	170	1400	0.25	0.1	46	<+0.097
1N5265B	62	58.9	65.1	2	185	1400	0.25	0.1	47	<+0.097
1N5266B	68	64.6	71.4	1.8	230	1600	0.25	0.1	52	<+0.097
1N5267B	75	71.25	78.75	1.7	270	1700	0.25	0.1	56	<+0.098

[1] Tested with pulses t_p = 20 ms.

Power Dissipation vs Ambient Temperature

