

YZPST-1N5220B-1N5281B

SILICON PLANAR ZENER DIODES

Standard Zener voltage

tolerance is $\pm 20\%$.

Add suffix "A" for $\pm 10\%$

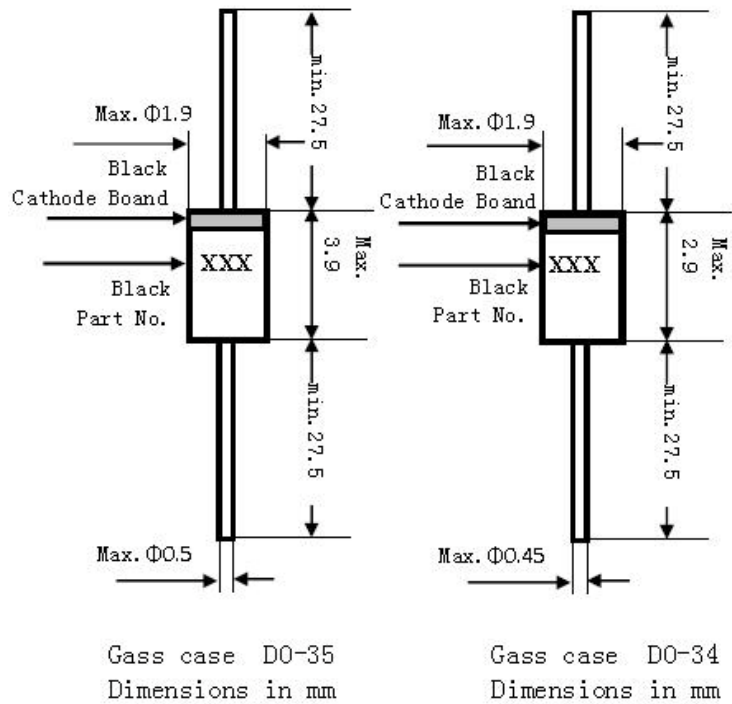
suffix "B" for $\pm 5\%$

Tolerance suffix "C" for $\pm 2\%$

tolerance. Other tolerance.

non standard and higher Zener

voltages are upon request.



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation at $T_{amb} = 75^\circ\text{C}$	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	200	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +200	$^\circ\text{C}$
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.			
Characteristics at $T_a = 25^\circ\text{C}$			
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_f = 200\text{mA}$	V_f	1.1	V
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.			

TYPE	Zener Voltage Range		Maximum Zener Impedance ¹⁾			Maximum Reverse Leakage Current		Temp.Coefficient of Zener Voltage
	V _Z	I _{ZT}	I _{ZT}	I _{ZK}	at I _{ZK}	I _R ²⁾	at V _R	TK _{VZ}
	V	mA	Ω	Ω	mA	μA	V	%/K

500mw ZENER DIODES/DO-35 or DO-34

1N5220B	2.2	20	30	1150	0.25	100	1	<-0.085
1N5221B	2.4	20	30	1200	0.25	100	1	<-0.085
1N5222B	2.5	20	30	1250	0.25	100	1	<-0.085
1N5223B	2.7	20	30	1300	0.25	75	1	<-0.080
1N5224B	2.8	20	30	1400	0.25	75	1	<-0.080
1N5225B	3	20	29	1600	0.25	50	1	<-0.075
1N5226B	3.3	20	28	1600	0.25	25	1	<-0.070
1N5227B	3.6	20	24	1700	0.25	15	1	<-0.065
1N5228B	3.9	20	23	1900	0.25	10	1	<-0.060
1N5229B	4.3	20	22	2000	0.25	5	1	<-0.055
1N5230B	4.7	20	19	1900	0.25	5	2	<±0.030
1N5231B	5.1	20	17	1600	0.25	5	2	<±0.030
1N5232B	5.6	20	11	1600	0.25	5	3	<+0.038
1N5233B	6	20	7	1600	0.25	5	3.5	<+0.038
1N5234B	6.2	20	7	1000	0.25	5	4	<+0.045
1N5235B	6.8	20	5	750	0.25	3	5	<+0.050
1N5236B	7.5	20	6	500	0.25	3	6	<+0.058
1N5237B	8.2	20	8	500	0.25	3	6.5	<+0.062
1N5238B	8.7	20	8	600	0.25	3	6.5	<+0.065
1N5239B	9.1	20	10	600	0.25	3	7	<+0.068
1N5240B	10	20	17	600	0.25	3	8	<+0.075
1N5241B	11	20	22	600	0.25	2	8.4	<+0.076
1N5242B	12	20	30	600	0.25	1	9.1	<+0.077
1N5243B	13	9.5	13	600	0.25	0.5	9.9	<+0.079
1N5244B	14	9	15	600	0.25	0.1	10	<+0.082
1N5245B	15	8.5	16	600	0.25	0.1	11	<+0.082
1N5246B	16	7.8	17	600	0.25	0.1	12	<+0.083
1N5247B	17	7.4	19	600	0.25	0.1	13	<+0.084
1N5248B	18	7	21	600	0.25	0.1	14	<+0.085
1N5249B	19	6.6	23	600	0.25	0.1	14	<+0.086
1N5250B	20	6.2	25	600	0.25	0.1	15	<+0.086
1N5251B	22	5.6	29	600	0.25	0.1	17	<+0.087
1N5252B	24	5.2	33	600	0.25	0.1	18	<+0.088
1N5253B	25	5	35	600	0.25	0.1	19	<+0.089
1N5254B	27	4.6	41	600	0.25	0.1	21	<+0.090

1N5255B	28	4.5	44	600	0.25	0.1	21	<+0.091
1N5256B	30	4.2	49	600	0.25	0.1	23	<+0.091
1N5257B	33	3.8	58	700	0.25	0.1	25	<+0.092
1N5258B	36	3.4	70	700	0.25	0.1	27	<+0.093
1N5259B	39	3.2	80	800	0.25	0.1	30	<+0.094
1N5260B	43	3	93	900	0.25	0.1	33	<+0.095
1N5261B	47	2.7	105	1000	0.25	0.1	36	<+0.095
1N5262B	51	2.5	125	1100	0.25	0.1	39	<+0.096
1N5263B	56	2.2	150	1300	0.25	0.1	43	<+0.096
1N5264B	60	2.1	170	1400	0.25	0.1	46	<+0.097
1N5265B	62	2	185	1400	0.25	0.1	47	<+0.097
1N5266B	68	1.8	230	1600	0.25	0.1	52	<+0.097

TYPE	Zener Voltage Range		Maximum Zener Impedance ¹⁾			Maximum Reverse Leakage Current		Temp.Coefficient of Zener Voltage
	V _Z	I _{ZT}	I _{ZT}	I _{ZK}	at I _{ZK}	I _R ²⁾	at V _R	TK _{Vz}
	V	mA	Ω	Ω	mA	μA	V	%/K

500mw ZENER DIODES/DO-35 or DO-34

1N5267B	75	1.7	270	1700	0.25	0.1	56	<+0.098
1N5268B	82	1.5	330	2000	0.25	0.1	62	<+0.098
1N5269B	87	1.4	370	2200	0.25	0.1	68	<+0.099
1N5270B	91	1.4	400	2300	0.25	0.1	69	<+0.099
1N5271B	100	1.3	500	—	—	0.1	75	<+0.100
1N5272B	110	1.2	700	—	—	0.1	83	<+0.100
1N5273B	120	1	950	—	—	0.1	90	<+0.100
1N5274B	130	0.95	1100	—	—	0.1	98	<+0.110
1N5275B	140	0.9	1300	—	—	0.1	105	<+0.110
1N5276B	150	0.85	1500	—	—	0.1	113	<+0.110
1N5277B	160	0.8	1700	—	—	0.1	120	<+0.115
1N5278B	170	0.74	1900	—	—	0.1	127	<+0.115
1N5279B	180	0.68	2200	—	—	0.1	135	<+0.120
1N5280B	190	0.66	2400	—	—	0.1	142	<+0.120
1N5281B	200	0.65	2500	—	—	0.1	150	<+0.120

¹⁾The Zener Impedance is derived from the 60HZ AC voltage which results when an AC current having RMS value equal to 10% of the Zener Current(I_{ZT} or I_{ZK}) is superimpose on I_Z or I_{Zk}. Zener Impedance is measured at two pointts to insure a sharp knee on the breadown curve and to eliminate unstable units.

²⁾Valid provided that leads at a distanc of 8 mm from case are kept at kept at ambient temperature.