FAIRCHILD SEMICONDUCTOR®

Zeners
1N5221B - 1N5279B

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation Derate above 75°C	500 4.0	mW mW/°C
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Maximum Junction Operating Temperature	+ 200	°C
	Lead Temperature (1/16" from case for 10 seconds)	+ 230	°C

*These ratings are limiting values above which the serviceability of the diode may be impaired.

**Non-recurrent square wave PW= 8.3 ms, TA= 50 degrees C.

NOTES:
1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Tolerance = 5%

DO-35 Glass case
COLOR BAND DENOTES CATHODE

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device	V_Z (V)	Z_Z (Ω) @	I_Z (mA)	Z_{ZK} (Ω) @	I_{ZK} (mA)	I_R (µA) @	V_R (V)	T_C (%/°C)
1N5221B	2.4	30	20	1,200	0.25	100	1.0	- 0.085
1N5222B	2.5	30	20	1,250	0.25	100	1.0	- 0.085
1N5223B	2.7	30	20	1,300	0.25	75	1.0	- 0.080
1N5224B	2.8	30	20	1,400	0.25	75	1.0	- 0.080
1N5225B	3.0	29	20	1,600	0.25	50	1.0	- 0.075
1N5226B	3.3	28	20	1,600	0.25	25	1.0	- 0.07
1N5227B	3.6	24	20	1,700	0.25	15	1.0	- 0.065
1N5228B	3.9	23	20	1,900	0.25	10	1.0	- 0.06
1N5229B	4.3	22	20	2,000	0.25	5.0	1.0	+/- 0.055
1N5230B	4.7	19	20	1,900	0.25	2.0	1.0	+/- 0.03
1N5231B	5.1	17	20	1,600	0.25	2.0	2.0	+/- 0.03
1N5232B	5.6	11	20	1,600	0.25	3.0	3.0	0.038
1N5233B	6.0	7.0	20	1,600	0.25	3.5	3.5	0.038
1N5234B	6.2	7.0	20	1,000	0.25	4.0	4.0	0.045
1N5235BT	6.8	5.0	20	750	0.25	5.0	5.0	0.05
1N5236BT	7.5	6.0	20	500	0.25	6.0	6.0	0.058
1N5237BT	8.2	8.0	20	500	0.25	6.5	6.5	0.062
1N5238BT	8.7	8.0	20	600	0.25	6.5	6.5	0.065
1N5239BT	9.1	10	20	600	0.25	7.0	7.0	0.068
1N5240BT	10	17	20	600	0.25	8.0	8.0	0.075
1N5241BT	11	22	20	600	0.25	8.4	8.4	0.076
1N5242BT	12	30	20	600	0.25	0.1	9.1	0.077
1N5243BT	13	13	9.5	600	0.25	0.1	9.9	0.079
1N5244BT	14	15	9.0	600	0.25	0.1	10	0.080
1N5245BT	15	16	8.5	600	0.25	0.1	11	0.082

Zeners (1N5221B - 1N5279B)
(continued)

Electrical Characteristics (Continued)
T_A = 25°C unless otherwise noted

Device	V_Z (V)	Z_Z (Ω) @	I_Z (mA)	Z_{ZK} (Ω) @	I_{ZK} (mA)	V_R (V) @	I_R (µA)	T_C (%/°C)
1N5246BT	16	17	7.8	600	0.25	12	0.1	0.083
1N5247BT	17	19	7.4	600	0.25	13	0.1	0.084
1N5248BT	18	21	7.0	600	0.25	14	0.1	0.085
1N5249BT	19	23	6.6	600	0.25	14	0.1	0.085
1N5250BT	20	25	6.2	600	0.25	15	0.1	0.086
1N5251B	22	29	5.6	600	0.25	17	0.1	0.087
1N5252B	24	33	5.2	600	0.25	18	0.1	0.088
1N5253B	25	35	5.0	600	0.25	19	0.1	0.088
1N5254B	27	41	4.6	600	0.25	21	0.1	0.089
1N5255B	28	44	4.5	600	0.25	21	0.1	0.090
1N5256B	30	49	4.2	600	0.25	23	0.1	0.091
1N5257B	33	58	3.8	700	0.25	25	0.1	0.092
1N5258B	36	70	3.4	700	0.25	27	0.1	0.093
1N5259B	39	80	3.2	800	0.25	30	0.1	0.094
1N5260B	43	93	3.0	900	0.25	33	0.1	0.095
1N5261B	47	105	2.7	1000	0.25	36	0.1	0.095
1N5262B	51	125	2.5	1100	0.25	39	0.1	0.096
1N5263B	56	150	2.2	1300	0.25	43	0.1	0.096
1N5264B	60	170	2.1	1400	0.25	46	0.1	0.097
1N5265B	62	185	2.0	1400	0.25	47	0.1	0.097
1N5266B	68	230	1.8	1600	0.25	52	0.1	0.097
1N5267B	75	270	1.7	1700	0.25	56	0.1	0.098
1N5268B	85	330	1.5	2000	0.25	62	0.1	0.098
1N5269B	87	370	1.4	2200	0.25	68	0.1	0.099
1N5270B	91	400	1.4	2300	0.25	69	0.1	0.099
1N5271B	100	500	1.3	2600	0.25	76	0.1	0.099
1N5272B	110	750	1.1	3000	0.25	84	0.1	0.11
1N5273B	120	900	1.0	4000	0.25	91	0.1	0.11
1N5274B	130	1100	0.95	4500	0.25	99	0.1	0.11
1N5275B	140	1300	0.90	4500	0.25	106	0.1	0.11
1N5276B	150	1500	0.85	5000	0.25	114	0.1	0.11
1N5277B	160	1700	0.80	5500	0.25	122	0.1	0.11
1N5278B	170	1900	0.74	5500	0.25	129	0.1	0.11
1N5279B	180	2200	0.68	6000	0.25	137	0.1	0.11

V_F Forward Voltage = 1.2 V Max. @ I_F = 200 mA

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