

500mW Zener Diode

1N5200B Series

※This product is marketed only in countries other than Japan.

●Application

Constant voltage control

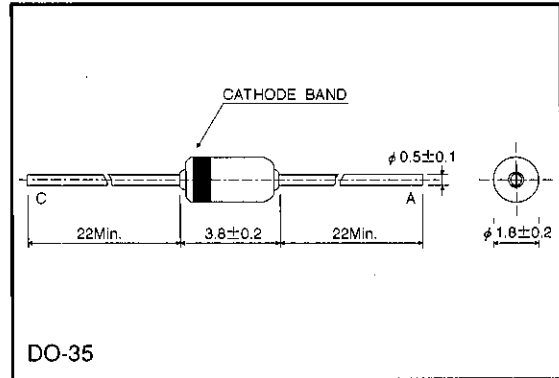
●Features

- 1) Designed for compact surface mounting (LL-34)
- 2) High reliability

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Power dissipation	P	500	mW
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature	T_{stg}	$-65 \sim +175$	$^\circ\text{C}$

● Electrical characteristics (Ta=25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current		Temperature coefficient
	Vz (V)		Iz (mA)	Zz (Ω)	Iz (mA)	Zzk (Ω)	Iz (mA)	I _R (μA)	V _R (V)	θ Vz (%/°C)
	Min.	Max.								
1N5231B	4.85	5.36	20	17	20	1600	0.25	5.0	2.0	±0.030
1N5232B	5.32	5.88	20	11	20	1600	0.25	5.0	3.0	+0.038
1N5233B	5.70	6.30	20	7.0	20	1600	0.25	5.0	3.5	+0.038
1N5234B	5.89	6.51	20	7.0	20	1000	0.25	5.0	4.0	+0.045
1N5235B	6.46	7.14	20	5.0	20	750	0.25	3.0	5.0	+0.050
1N5236B	7.13	7.88	20	6.0	20	500	0.25	3.0	6.0	+0.058
1N5237B	7.79	8.61	20	8.0	20	500	0.25	3.0	6.5	+0.062
1N5238B	8.27	9.14	20	8.0	20	600	0.25	3.0	6.5	+0.065
1N5239B	8.65	9.56	20	10	20	600	0.25	3.0	7.0	+0.068
1N5240B	9.50	10.50	20	17	20	600	0.25	3.0	8.0	+0.075
1N5241B	10.45	11.55	20	22	20	600	0.25	2.0	8.4	+0.076
1N5242B	11.40	12.60	20	30	20	600	0.25	1.0	9.1	+0.077
1N5243B	12.35	13.65	9.5	13	9.5	600	0.25	0.5	9.9	+0.079
1N5244B	13.30	14.70	9.0	15	9.0	600	0.25	0.1	10.0	+0.082
1N5245B	14.25	15.75	8.5	16	8.5	600	0.25	0.1	11.0	+0.082
1N5246B	15.20	16.80	7.8	17	7.8	600	0.25	0.1	12.0	+0.083
1N5247B	16.15	17.85	7.4	19	7.4	600	0.25	0.1	13.0	+0.084
1N5248B	17.10	18.90	7.0	21	7.0	600	0.25	0.1	14.0	+0.085
1N5249B	18.05	19.95	6.6	23	6.6	600	0.25	0.1	14.0	+0.086
1N5250B	19.00	21.00	6.2	25	6.2	600	0.25	0.1	15.0	+0.086
1N5251B	20.90	23.10	5.6	29	5.6	600	0.25	0.1	17.0	+0.087
1N5252B	22.80	25.20	5.2	33	5.2	600	0.25	0.1	18.0	+0.088

(1) The Zener voltage (Vz) is measured under normal conditions.

(2) The operating resistances (Zz, Zzk) are measured by superimposing a minute alternating current in the regulated current (Iz).

● Electrical characteristic curves (Ta=25°C)

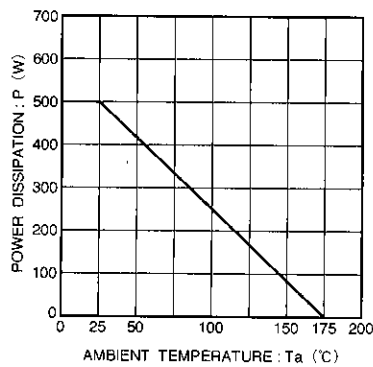


Fig 1. Derating curve

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