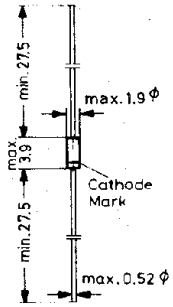
1N5225 THRU 1N5262

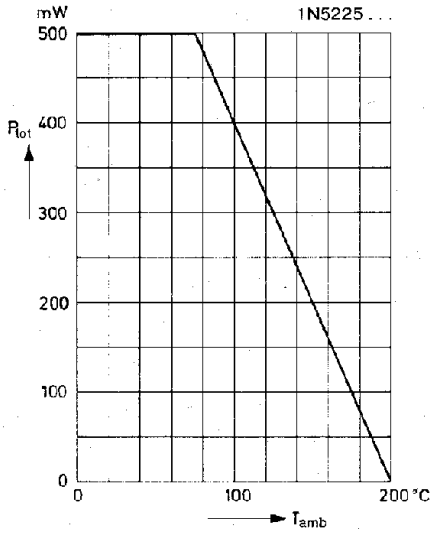
SILICON PLANAR ZENER DIODES

Silicon Planar Zener Diodes
Standard Zener voltage tolerance is ±20%. Add suffix "A" for ±10% tolerance and suffix "B" for ±5% tolerance. Other tolerances, non standard and higher Zener voltages upon request.



Glass case JEDEC DO-35
Dimensions in mm

Admissible power dissipation versus ambient temperature
Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature



Absolute Maximum Ratings

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at T_{amb} = 75 °C	P_{tot}	500[1]	mW
Junction Temperature	T_j	200	°C
Storage Temperature Range	T_S	−65 to +200	°C
[1] Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature			

Characteristics at T_{amb} = 25 °C

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	–	–	0.3[1]	K/mW
Forward Voltage at I_F = 200 mA	V_F	–	–	1.1	V
[1] Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature					

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Type	Nominal Zener voltage[3] at I_{ZT} V_Z V	Test current I_{ZT} mA	Maximum Zener impedance[1] at I_{ZT} Z_{ZT} Ω	at I_{ZK} = 0.25 mA Z_{ZK} Ω	Typical temperature coefficient α_{VZ} %/K	Maximum reverse leakage current I_R µA	Test voltage Suffix A V_R V	Suffix B V_R V	Maximum regulator current[2] I_{ZM} mA
1N5225	3.0	20	29	1600	−0.075	50	0.95	1.0	152
1N5226	3.3	20	28	1600	−0.070	25	0.95	1.0	138
1N5227	3.6	20	24	1700	−0.065	15	0.95	1.0	126
1N5228	3.9	20	23	1900	−0.060	10	0.95	1.0	115
1N5229	4.3	20	22	2000	−0.055	5	0.95	1.0	106
1N5230	4.7	20	19	1900	±0.030	5	1.9	2.0	97
1N5231	5.1	20	17	1600	±0.030	5	1.9	2.0	89
1N5232	5.6	20	11	1600	+0.038	5	2.9	3.0	81
1N5233	6.0	20	7	1600	+0.038	5	3.3	3.5	76
1N5234	6.2	20	7	1000	+0.045	5	3.8	4.0	73
1N5235	6.8	20	5	750	+0.050	3	4.8	5.0	67
1N5236	7.5	20	6	500	+0.058	3	5.7	6.0	61
1N5237	8.2	20	8	500	+0.062	3	6.2	6.5	55
1N5238	8.7	20	8	600	+0.065	3	6.2	6.5	52
1N5239	9.1	20	10	600	+0.068	3	6.7	7.0	50
1N5240	10	20	17	600	+0.075	3	7.6	8.0	45
1N5241	11	20	22	600	+0.076	2	8.0	8.4	41
1N5242	12	20	30	600	+0.077	1	8.7	9.1	38
1N5243	13	9.5	13	600	+0.079	0.5	9.4	9.9	35
1N5244	14	9.0	15	600	+0.082	0.1	9.5	10	32
1N5245	15	8.5	16	600	+0.082	0.1	10.5	11	30
1N5246	16	7.8	17	600	+0.083	0.1	11.4	12	28
1N5247	17	7.4	19	600	+0.084	0.1	12.4	13	27
1N5248	18	7.0	21	600	+0.085	0.1	13.3	14	25
1N5249	19	6.6	23	600	+0.086	0.1	13.3	14	24
1N5250	20	6.2	25	600	+0.086	0.1	14.3	15	23
1N5251	22	5.6	29	600	+0.087	0.1	16.2	17	21
1N5252	24	5.2	33	600	+0.087	0.1	17.1	18	19.1
1N5253	25	5.0	35	600	+0.089	0.1	18.1	19	18.2
1N5254	27	4.6	41	600	+0.090	0.1	20	21	16.8
1N5255	28	4.5	44	600	+0.091	0.1	20	21	16.2
1N5256	30	4.2	49	600	+0.091	0.1	22	23	15.1
1N5257	33	3.8	58	700	+0.092	0.1	24	25	13.8
1N5258	36	3.4	70	700	+0.093	0.1	26	27	12.6
1N5259	39	3.2	80	800	+0.094	0.1	29	30	11.6
1N5260	43	3.0	93	900	+0.095	0.1	31	33	10.6
1N5261	47	2.7	105	1000	+0.095	0.1	34	36	9.7
1N5262	51	2.5	125	1100	+0.096	0.1	37	39	8.9

[1] The Zener Impedance is derived from the 60 Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener Impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

[2] Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

[3] Measured under thermal equilibrium and DC test conditions.

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