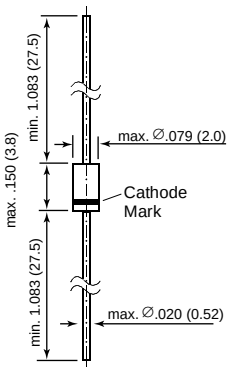
1N5225 THRU 1N5267

ZENER DIODES

DO-35



Dimensions are in inches and (millimeters)

FEATURES

- Silicon Planar Power Zener Diodes
- Standard Zener voltage tolerance is ± 5% with a “B” suffix. Other tolerances are available upon request.

- These diodes are also available in Mini-MELF case with the type designation ZMM5225 ... ZMM5267, SOT-23 case with the type designation MMBZ5265 ... MMBZ5267 and SOD-23 case with the types designation MMSZ5225 ... MMSZ5267.

MECHANICAL DATA

Case: DO-35 Glass Case
Weight: approx. 0.13 g

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	*VALUE*	*UNIT*
Zener Current (see Table “Characteristics”)			
Power Dissipation at T_{amb} = 75°C	P_{tot}	500(1)	mW
Maximum Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	– 65 to +175	°C

	SYMBOL	*MIN.*	*TYP.*	*MAX.*	*UNIT*
Thermal Resistance Junction to Ambient Air	$R_{\Theta JA}$	–	–	300(1)	°C/W
Forward Voltage at I_F = 200 mA	V_F	–	–	1.1	Volts

NOTES:
Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

GENERAL SEMICONDUCTOR®

1N5225 THRU 1N5267

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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)	Maximum Zener impedance[1] at I_{ZK}=0.25mA Z_{ZK} (Ω)	Typical Temperature Coefficient α_{VZ} (% / K)	Maximum Reverse Leakage Current I_R (μA)	Maximum Reverse Leakage Current Test Voltage V_R (V)	Maximum Regulator Current[2] I_{ZM} (mA)
1N5225	3.0	20	29	1600	– 0.075	50	1.0	152
1N5226	3.3	20	28	1600	–0.070	25	1.0	138
1N5227	3.6	20	24	1700	–0.065	15	1.0	126
1N5228	3.9	20	23	1900	–0.060	10	1.0	115
1N5229	4.3	20	22	2000	–0.055	5.0	1.0	106
1N5230	4.7	20	19	1900	±0.030	5.0	2.0	97
1N5231	5.1	20	17	1600	±0.030	5.0	2.0	89
1N5232	5.6	20	11	1600	+0.038	5.0	3.0	81
1N5233	6.0	20	7	1600	+0.038	5.0	3.5	76
1N5234	6.2	20	7	1000	+0.045	5.0	4.0	73
1N5235	6.8	20	5	750	+0.050	3.0	5.0	67
1N5236	7.5	20	6	500	+0.058	3.0	6.0	61
1N5237	8.2	20	8	500	+0.062	3.0	6.5	55
1N5238	8.7	20	8	600	+0.065	3.0	6.5	52
1N5239	9.1	20	10	600	+0.068	3.0	7.0	50
1N5240	10	20	17	600	+0.075	3.0	8.0	45
1N5241	11	20	22	600	+0.076	2.0	8.4	41
1N5242	12	20	30	600	+0.077	1.0	9.1	38
1N5243	13	9.5	13	600	+0.079	0.5	9.9	35
1N5244	14	9.0	15	600	+0.082	0.1	10	32
1N5245	15	8.5	16	600	+0.082	0.1	11	30
1N5246	16	7.8	17	600	+0.083	0.1	12	28
1N5247	17	7.4	19	600	+0.084	0.1	13	27
1N5248	18	7.0	21	600	+0.085	0.1	14	25
1N5249	19	6.6	23	600	+0.086	0.1	14	24
1N5250	20	6.2	25	600	+0.086	0.1	15	23
1N5251	22	5.6	29	600	+0.087	0.1	17	21
1N5252	24	5.2	33	600	+0.087	0.1	18	19.1
1N5253	25	5.0	35	600	+0.089	0.1	19	18.2
1N5254	27	4.6	41	600	+0.090	0.1	21	16.8
1N5255	28	4.5	44	600	+0.091	0.1	21	16.2
1N5256	30	4.2	49	600	+0.091	0.1	23	15.1
1N5257	33	3.8	58	700	+0.092	0.1	25	13.8
1N5258	36	3.4	70	700	+0.093	0.1	27	12.6
1N5259	39	3.2	80	800	+0.094	0.1	30	11.6
1N5260	43	3.0	93	900	+0.095	0.1	33	10.6
1N5261	47	2.7	105	1000	+0.095	0.1	36	9.7
1N5262	51	2.5	125	1100	+0.096	0.1	39	8.9
1N5263	56	2.2	150	1300	+0.096	0.1	43	–
1N5264	60	2.1	170	1400	+0.097	0.1	46	–
1N5265	62	2.0	185	1400	+0.097	0.1	47	–
1N5266	68	1.8	230	1600	+0.097	0.1	52	–
1N5267	75	1.7	270	1700	+0.098	0.1	56	–

NOTES:

(1) The Zener impedance is derived from the 1 kHz 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 with device junction in thermal equilibrium

Admissible power dissipation versus ambient temperature

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