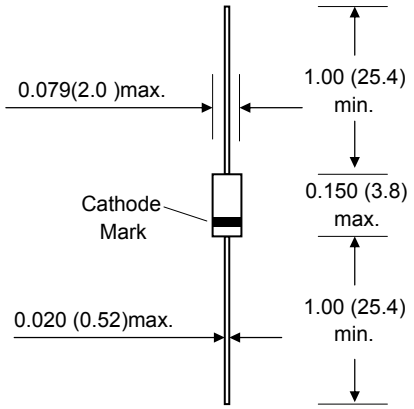
1N5221 - 1N5267

ZENER DIODES

V_Z : 2.4 - 75 V
P_D : 500 mW

DO - 35 Glass
(DO-204AH)



Dimensions in inches and (millimeters)

FEATURES :

- Silicon planar power zener diodes.
- Standard zener voltage tolerance is ± 10%.
- Other tolerances are available upon request.
- These diodes are also available in MiniMELF case with the type designation ZMM5221 ... ZMM5267
- Pb / RoHS Free

MECHANICAL DATA :

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

Maximum Ratings and Thermal Characteristics

Rating at 25 °C ambient temperature unless otherwise specifie

Parameter	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Maximum Forward Voltage at I_F = 200 mA.	V_F	1.1	V
Power Dissipation at Ta = 75 °C	P_D	500(1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300(1)	°C/W
Junction temperature	T_J	175	°C
Storage temperature range	T_{STG}	-65 to + 175	°C

Note:

(1) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Type	Nominal Zener Voltage V_Z @ I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance (1)		Maximum Reverse Leakage Current I_R @ V_R		Typical Temperature Coefficient α_{VZ}(%/ °C)	Maximum Regulator Current(2) I_{ZM}
			Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK} = 0.25mA				
	(V)	(mA)	(Ω)	(Ω)	(μA)	(V)		(mA)
1N5221	2.4	20	30	1200	100	1.0	-0.085	190
1N5222	2.5	20	30	1250	100	1.0	-0.085	182
1N5223	2.7	20	30	1300	75	1.0	-0.080	168
1N5224	2.8	20	30	1400	75	1.0	-0.080	162
1N5225	3.0	20	29	1600	50	1.0	-0.075	152
1N5226	3.3	20	28	1600	25	1.0	-0.070	138
1N5227	3.6	20	24	1700	15	1.0	-0.065	126
1N5228	3.9	20	23	1900	10	1.0	-0.060	115
1N5229	4.3	20	22	2000	5.0	1.0	± 0.055	106
1N5230	4.7	20	19	1900	5.0	2.0	± 0.030	97
1N5231	5.1	20	17	1600	5.0	2.0	± 0.030	89
1N5232	5.6	20	11	1600	5.0	3.0	+0.038	81
1N5233	6.0	20	7	1600	5.0	3.5	+0.038	76
1N5234	6.2	20	7	1000	5.0	4.0	+0.045	73
1N5235	6.8	20	5	750	3.0	5.0	+0.050	67
1N5236	7.5	20	6	500	3.0	6.0	+0.058	61
1N5237	8.2	20	8	500	3.0	6.5	+0.062	55
1N5238	8.7	20	8	600	3.0	6.5	+0.065	52
1N5239	9.1	20	10	600	3.0	7.0	+0.068	50
1N5240	10	20	17	600	3.0	8.0	+0.075	45
1N5241	11	20	22	600	2.0	8.4	+0.076	41
1N5242	12	20	30	600	1.0	9.1	+0.077	38
1N5243	13	9.5	13	600	0.5	9.9	+0.079	35
1N5244	14	9.0	15	600	0.1	10	+0.082	32
1N5245	15	8.5	16	600	0.1	11	+0.082	30
1N5246	16	7.8	17	600	0.1	12	+0.083	28
1N5247	17	7.4	19	600	0.1	13	+0.084	27
1N5248	18	7.0	21	600	0.1	14	+0.085	25
1N5249	19	6.6	23	600	0.1	14	+0.086	24
1N5250	20	6.2	25	600	0.1	15	+0.086	23
1N5251	22	5.6	29	600	0.1	17	+0.087	21
1N5252	24	5.2	33	600	0.1	18	+0.088	19.1
1N5253	25	5.0	35	600	0.1	19	+0.089	18.2
1N5254	27	4.6	41	600	0.1	21	+0.090	16.8
1N5255	28	4.5	44	600	0.1	21	+0.091	16.2
1N5256	30	4.2	49	600	0.1	23	+0.091	15.1
1N5257	33	3.8	58	700	0.1	25	+0.092	13.8
1N5258	36	3.4	70	700	0.1	27	+0.093	12.6
1N5259	39	3.2	80	800	0.1	30	+0.094	11.6
1N5260	43	3.0	93	900	0.1	33	+0.095	10.6
1N5261	47	2.7	105	1000	0.1	36	+0.095	9.7
1N5262	51	2.5	125	1100	0.1	39	+0.096	8.9
1N5263	56	2.2	150	1300	0.1	43	+0.096	-
1N5264	60	2.1	170	1400	0.1	46	+0.097	-
1N5265	62	2.0	185	1400	0.1	47	+0.097	-
1N5266	68	1.8	230	1600	0.1	52	+0.097	-
1N5267	75	1.7	270	1700	0.1	56	+0.098	-

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 insur 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) Standard Zener voltage tolerance is ± 10%. Add suffix “B” for ± 5% tolerance