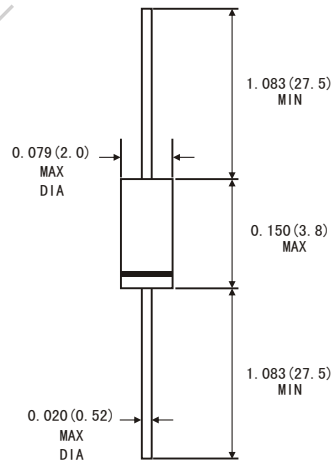


FEATURES

- Standard zener voltage tolerance is $\pm 20\%$. Add suffix "A" for $\pm 10\%$ tolerance and suffix "B" for $\pm 5\%$ tolerance, suffix "C" for $\pm 2\%$ tolerance. Other tolerance, non standard and higher zener voltages are upon request.
- High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



DO-35



MECHANICAL DATA

- Case: DO-35 glass case
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.13 gram

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) ($T_A=25^{\circ}\text{C}$)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at $T_A=75^{\circ}\text{C}$	P_{tot}	500 ¹⁾	mW
Junction temperature	T_J	200	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-65 to +200	$^{\circ}\text{C}$

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)

	Symbols	Min	Typ	Max	Units
Thermal resistance junction to ambient air	$R_{\theta JA}$			0.3 ¹⁾	K/mW
Forward voltage at $I_F=200\text{mA}$	V_F			1.1	V

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

1N5220 THRU 1N5266 SILICON PLANAR ZENER DIODES

Type	Zener Voltage range ¹⁾		Maximum zener impedance ²⁾			Maximum Reverse Leakage Current		Temp. Coefficient of zener voltage
	V _{ZNOM} ³⁾	I _{ZT}	r _{ZK} and r _{ZK} at I _{ZK}			I _R ²⁾ at V _R		TK _{Vz}
	V	mA	Ω	Ω	mA	μA	V	%/K
1N5220	2.2	20	<30	<1150	0.25	<100	1	<-0.085
1N5221	2.4	20	<30	<1200	0.25	<100	1	<-0.085
1N5222	2.5	20	<30	<1250	0.25	<100	1	<-0.085
1N5223	2.7	20	<30	<1300	0.25	<75	1	<-0.080
1N5224	2.8	20	<30	<1400	0.25	<75	1	<-0.080
1N5225	3	20	<29	<1600	0.25	<50	1	<-0.075
1N5226	3.3	20	<28	<1600	0.25	<25	1	<-0.070
1N5227	3.6	20	<24	<1700	0.25	<15	1	<-0.065
1N5228	3.9	20	<23	<1900	0.25	<10	1	<-0.060
1N5229	4.3	20	<22	<2000	0.25	<5	1	<-0.055
1N5230	4.7	20	<19	<1900	0.25	<5	2	<±0.030
1N5231	5.1	20	<17	<1600	0.25	<5	2	<±0.030
1N5232	5.6	20	<11	<1600	0.25	<5	3	<±0.038
1N5233	6	20	<7	<1600	0.25	<5	3.5	<±0.038
1N5234	6.2	20	<7	<1000	0.25	<5	4	<±0.045
1N5235	6.8	20	<5	<750	0.25	<3	5	<±0.050
1N5236	7.5	20	<6	<500	0.25	<3	6	<±0.058
1N5237	8.2	20	<8	<500	0.25	<3	6.5	<±0.062
1N5238	8.7	20	<8	<600	0.25	<3	6.5	<±0.065
1N5239	9.1	20	<10	<600	0.25	<3	7	<±0.068
1N5240	10	20	<17	<600	0.25	<3	8	<±0.075
1N5241	11	20	<22	<600	0.25	<2	8.4	<±0.076
1N5242	12	20	<30	<600	0.25	<1	9.1	<±0.077
1N5243	13	9.5	<13	<600	0.25	<0.5	9.9	<±0.079
1N5244	14	9	<15	<600	0.25	<0.1	10	<±0.082
1N5245	15	8.5	<16	<600	0.25	<0.1	11	<±0.082
1N5246	16	7.8	<17	<600	0.25	<0.1	12	<±0.083
1N5247	17	7.4	<19	<600	0.25	<0.1	13	<±0.084
1N5248	18	7	<21	<600	0.25	<0.1	14	<±0.085
1N5249	19	6.6	<23	<600	0.25	<0.1	14	<±0.086
1N5250	20	6.2	<25	<600	0.25	<0.1	15	<±0.086
1N5251	22	5.6	<29	<600	0.25	<0.1	17	<±0.087
1N5252	24	5.2	<33	<600	0.25	<0.1	18	<±0.088
1N5253	25	5	<35	<600	0.25	<0.1	19	<±0.089
1N5254	27	4.6	<41	<600	0.25	<0.1	21	<±0.090
1N5255	28	4.5	<44	<600	0.25	<0.1	21	<±0.091
1N5256	30	4.2	<49	<600	0.25	<0.1	23	<±0.091
1N5257	33	3.8	<58	<700	0.25	<0.1	25	<±0.092
1N5258	36	3.4	<70	<700	0.25	<0.1	27	<±0.093
1N5259	39	3.2	<80	<800	0.25	<0.1	30	<±0.094
1N5260	43	3	<93	<900	0.25	<0.1	33	<±0.095
1N5261	47	2.7	<105	<1000	0.25	<0.1	36	<±0.095
1N5262	51	2.5	<125	<1100	0.25	<0.1	39	<±0.096
1N5263	56	2.2	<150	<1300	0.25	<0.1	43	<±0.096
1N5264	60	2.1	<170	<1400	0.25	<0.1	46	<±0.097
1N5265	62	2	<185	<1400	0.25	<0.1	47	<±0.097
1N5266	68	1.8	<230	<1600	0.25	<0.1	52	<±0.097

1N5267 THRU 1N5281 SILICON PLANAR ZENER DIODES

Type	Zener Voltage range ¹⁾		Maximum zener impedance ²⁾			Maximum Reverse Leakage Current		Temp Coefficient of zener voltage
	V _{ZNOM} ³⁾	I _{ZT}	r _{ZK} and r _{ZK} at I _{ZK}			I _R ²⁾ at V _R		TK _{VZ}
	V	mA	Ω	Ω	mA	μA	V	%/K
1N5267	75	1.7	<270	<1700	0.25	<0.1	56	<+0.098
1N5268	82	1.5	<330	<2000	0.25	<0.1	62	<+0.098
1N5269	87	1.4	<370	<2200	0.25	<0.1	68	<+0.099
1N5270	91	1.4	<400	<2300	0.25	<0.1	69	<+0.099
1N5271	100	1.3	<500	--	--	<0.1	75	<+0.100
1N5272	110	1.2	<700	--	--	<0.1	83	<+0.100
1N5273	120	1	<950	--	--	<0.1	90	<+0.100
1N5274	130	0.95	<1100	--	--	<0.1	98	<+0.110
1N5275	140	0.9	<1300	--	--	<0.1	105	<+0.110
1N5276	150	0.85	<1500	--	--	<0.1	113	<+0.110
1N5277	160	0.8	<1700	--	--	<0.1	120	<+0.115
1N5278	170	0.74	<1900	--	--	<0.1	127	<+0.115
1N5279	180	0.68	<2200	--	--	<0.1	135	<+0.120
1N5280	190	0.66	<2400	--	--	<0.1	142	<+0.120
1N5281	200	0.65	<2500	--	--	<0.1	150	<+0.120

1) Tested with pulses tp=20ms.
2) The zener impedance is derived from the 50Hz 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.
3) Measured under thermal equilibrium and DC test conditions.
4) Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

1N5220 THRU 1N5281 SILICON PLANAR ZENER DIODES

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

