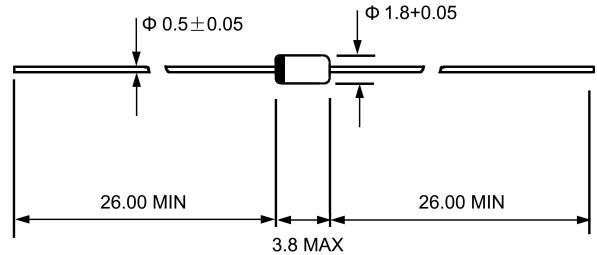


ZENER DIODES POWER DISSIPATION: 500 mW

FEATURES

Silicon planar power zener diodes
 Standard Zener voltage tolerance is $\pm 20\%$.
 Add suffix "A" for $\pm 10\%$ Tolerance, suffix
 "B" for $\pm 5\%$ tolerance, suffix "C" for $\pm 2\%$
 tolerance, Other tolerance, non standard
 and higher Zener voltages are upon request.

1N5221-1N5271



DO-35(GLASS)

Dimensions in millimeters

MECHANICAL DATA

Case:DO-35, Glass Case
 Terminals: Solderable per MIL-STD-202, Method 208
 Polarity: Cathode Band
 Marking: Type Number
 Approx Weight: 0.13 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

Parameter	SYMBOL	VALUE	UNIT
Power dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	500 ⁽¹⁾	mW
Junction temperature	T_J	175	°C
Storage temperature range	T_s	-55---+175	°C

Parameter	SYMBOL	MIN	TYP	MAX	UNIT
Thermal resistance junction to ambient	$R_{\theta JA}$	—	—	300 ⁽¹⁾	°C/W
Forward voltage at $I_F=200mA$	V_F	—	—	1.2	V

NOTES: (1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

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

Type	Nominal Zener Voltage ¹⁾	Test Current	Maximum Dynamic Impedance ¹⁾		Typical Temperature of Coefficient	Maximum Reverse Leakage Current	
	V_Z	I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}=0.25\text{mA}$	$\alpha V_Z@I_{ZT}$	I_{RM}	V_R
	V	mA	Ω	Ω	%/	μA	V
1N5221	2.4	20	30	1200	-0.085	100	1.0
1N5222	2.5	20	30	1250	-0.085	100	1.0
1N5223	2.7	20	30	1300	-0.080	75	1.0
1N5224	2.8	20	30	1400	-0.080	75	1.0
1N5225	3.0	20	29	1600	-0.075	50	1.0
1N5226	3.3	20	28	1600	-0.070	25	1.0
1N5227	3.6	20	24	1700	-0.065	15	1.0
1N5228	3.9	20	23	1900	-0.060	10	1.0
1N5229	4.3	20	22	2000	-0.055	5.0	1.0
1N5230	4.7	20	19	1900	+ 0.030	5.0	2.0
1N5231	5.1	20	17	1600	+ 0.030	5.0	2.0
1N5232	5.6	20	11	1600	+ 0.038	5.0	3.0
1N5233	6.0	20	7.0	1600	+ 0.038	5.0	3.5
1N5234	6.2	20	7.0	1000	+ 0.045	5.0	4.0
1N5235	6.8	20	5.0	750	+ 0.050	3.0	5.0
1N5236	7.5	20	6.0	500	+ 0.058	3.0	6.0
1N5237	8.2	20	8.0	500	+ 0.062	3.0	6.5
1N5238	8.7	20	8.0	600	+ 0.065	3.0	6.5
1N5239	9.1	20	10	600	+ 0.068	3.0	7.0
1N5240	10	20	17	600	+ 0.075	3.0	8.0
1N5241	11	20	22	600	+ 0.076	2.0	8.4
1N5242	12	20	30	600	+ 0.077	1.0	9.1
1N5243	13	10	13	600	+ 0.079	0.5	9.9
1N5244	14	9.0	15	600	+ 0.082	0.1	10
1N5245	15	8.5	16	600	+ 0.082	0.1	11
1N5246	16	7.8	17	600	+ 0.083	0.1	12
1N5247	17	7.4	19	600	+ 0.084	0.1	13
1N5248	18	7.0	21	600	+ 0.085	0.1	14
1N5249	19	6.6	23	600	+ 0.086	0.1	14
1N5250	20	6.2	25	600	+ 0.086	0.1	15
1N5251	22	5.6	29	600	+ 0.087	0.1	17
1N5252	24	5.2	33	600	+ 0.087	0.1	18
1N5253	25	5.0	35	600	+ 0.089	0.1	19
1N5254	27	4.6	41	600	+ 0.090	0.1	21
1N5255	28	4.5	44	600	+ 0.091	0.1	21
1N5256	30	4.2	49	600	+ 0.091	0.1	23
1N5257	33	3.8	58	700	+ 0.092	0.1	25
1N5258	36	3.4	70	700	+ 0.093	0.1	27
1N5259	39	3.2	80	800	+ 0.094	0.1	30
1N5260	43	3.0	93	900	+ 0.095	0.1	33
1N5261	47	2.7	105	1000	+ 0.095	0.1	36
1N5262	51	2.5	125	1100	+ 0.096	0.1	39
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
1N5268	85	1.5	330	2000	+ 0.098	0.1	62
1N5269	87	1.4	370	2200	+ 0.099	0.1	68
1N5270	91	1.4	400	2300	+ 0.099	0.1	69
1N5271	100	1.3	500	2600	+ 0.099	0.1	76

FIG.1 – BREAKDOWN CHARACTERISTICS

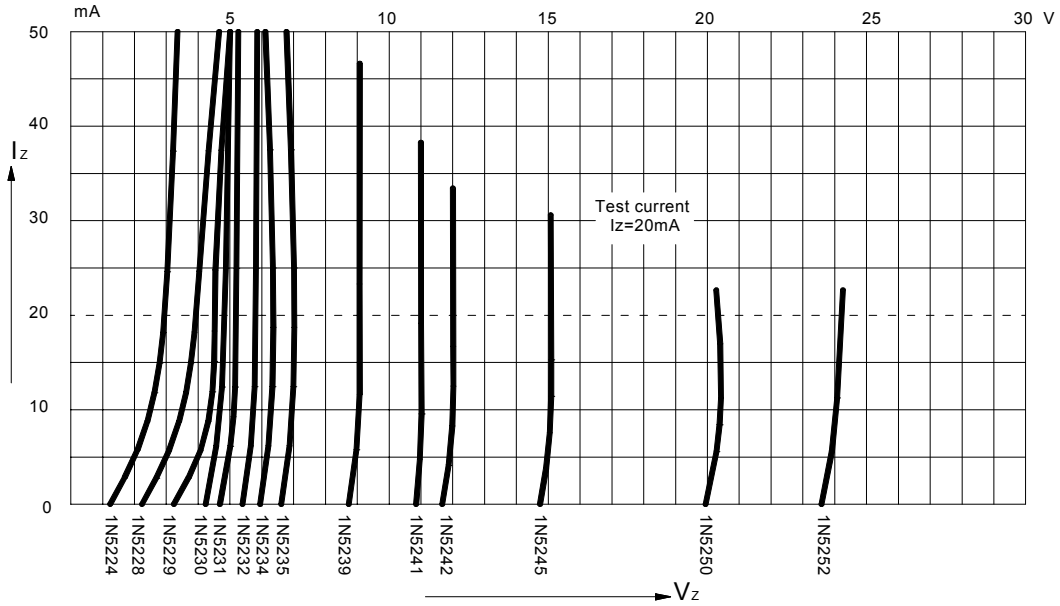


FIG.2 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

