



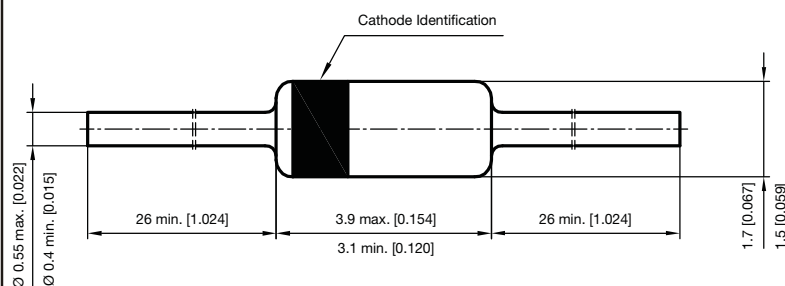
VOLTAGE RANGE

2.4 to 75 Volts

FEATURES

- Silicon planar power Zener diodes
- Standard Zener voltage tolerance is $\pm 5\%$ with a "B" suffix in the ordering code (e.g.: 1N5221B), suffix "C" is $\pm 2\%$ tolerance

DO-35



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Absolute Maximum Ratings (Rating at 25 °C ambient temperature unless otherwise specified)

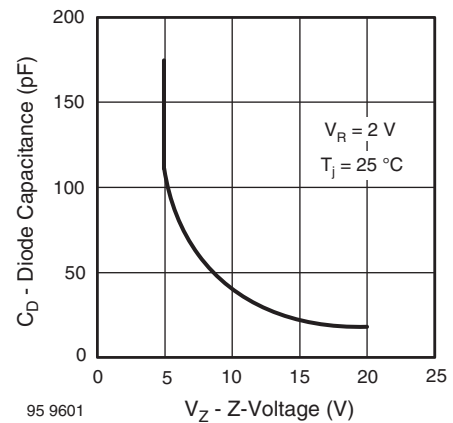
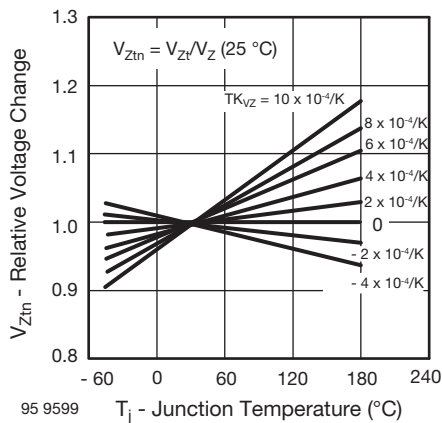
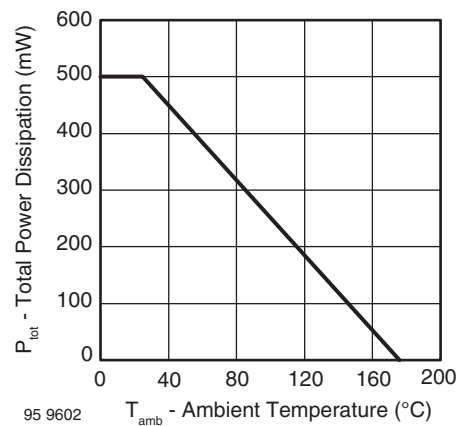
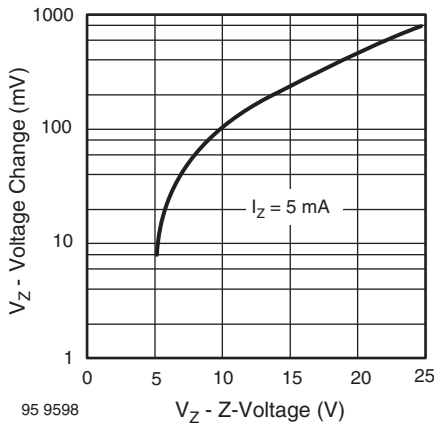
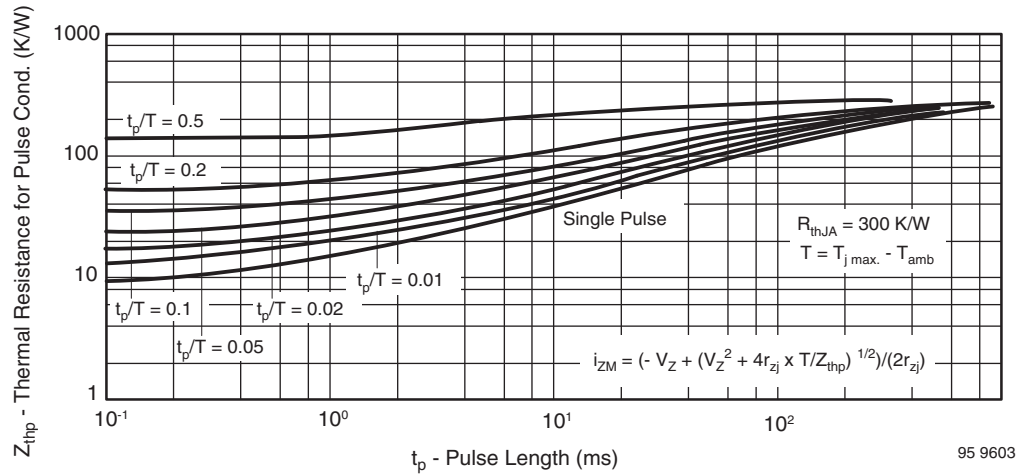
Parameter	Symbol	Value	Unit
DC Power Dissipation @ $T_L = 25^\circ\text{C}$ ¹⁾	P_D	500	mW
Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 175	°C

¹⁾ T_L = Lead temperature at 3/8" (9.5 mm) from body

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.2\text{ A}$	V_F	1.1	V

1N5221 THRU 1N5267



1N5221 THRU 1N5276

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)								
PART NUMBER	ZENER VOLTAGE RANGE ⁽¹⁾	TEST CURRENT		REVERSE LEAKAGE CURRENT		DYNAMIC RESISTANCE $f = 1\text{ kHz}$		TEMPERATURE COEFFICIENT
	V_Z at I_{ZT1}	I_{ZT1}	I_{ZT2}	I_R at V_R		Z_Z at I_{ZT1} ⁽¹⁾	Z_{ZK} at I_{ZT2}	α_{VZ}
	V	mA		μA	V	Ω		%/K
	NOM.			MAX.		MAX.	MAX.	TYP.
1N5221	2.4	20	0.25	100	1	30	1200	- 0.085
1N5222	2.5	20	0.25	100	1	30	1250	- 0.085
1N5223	2.7	20	0.25	75	1	30	1300	- 0.08
1N5224	2.8	20	0.25	75	1	30	1400	- 0.08
1N5225	3	20	0.25	50	1	29	1600	- 0.075
1N5226	3.3	20	0.25	25	1	28	1600	- 0.07
1N5227	3.6	20	0.25	15	1	24	1700	- 0.065
1N5228	3.9	20	0.25	10	1	23	1900	- 0.06
1N5229	4.3	20	0.25	5	1	22	2000	0.055
1N5230	4.7	20	0.25	5	2	19	1900	0.03
1N5231	5.1	20	0.25	5	2	17	1600	0.03
1N5232	5.6	20	0.25	5	3	11	1600	0.038
1N5233	6	20	0.25	5	3.5	7	1600	0.038
1N5234	6.2	20	0.25	5	4	7	1000	0.045
1N5235	6.8	20	0.25	3	5	5	750	0.05
1N5236	7.5	20	0.25	3	6	6	500	0.058
1N5237	8.2	20	0.25	3	6.5	8	500	0.062
1N5238	8.7	20	0.25	3	6.5	8	600	0.065
1N5239	9.1	20	0.25	3	7	10	600	0.068
1N5240	10	20	0.25	3	8	17	600	0.075
1N5241	11	20	0.25	2	8.4	22	600	0.076
1N5242	12	20	0.25	1	9.1	30	600	0.077
1N5243	13	9.5	0.25	0.5	9.9	13	600	0.079
1N5244	14	9	0.25	0.1	10	15	600	0.082
1N5245	15	8.5	0.25	0.1	11	16	600	0.082
1N5246	16	7.8	0.25	0.1	12	17	600	0.083
1N5247	17	7.4	0.25	0.1	13	19	600	0.084
1N5248	18	7	0.25	0.1	14	21	600	0.085
1N5249	19	6.6	0.25	0.1	14	23	600	0.086
1N5250	20	6.2	0.25	0.1	15	25	600	0.086
1N5251	22	5.6	0.25	0.1	17	29	600	0.087
1N5252	24	5.2	0.25	0.1	18	33	600	0.088
1N5253	25	5	0.25	0.1	19	35	600	0.089
1N5254	27	4.6	0.25	0.1	21	41	600	0.09
1N5255	28	4.5	0.25	0.1	21	44	600	0.091
1N5256	30	4.2	0.25	0.1	23	49	600	0.091
1N5257	33	3.8	0.25	0.1	25	58	700	0.092
1N5258	36	3.4	0.25	0.1	27	70	700	0.093
1N5259	39	3.2	0.25	0.1	30	80	800	0.094
1N5260	43	3	0.25	0.1	33	93	900	0.095
1N5261	47	2.7	0.25	0.1	36	105	1000	0.095
1N5262	51	2.5	0.25	0.1	39	125	1100	0.096
1N5263	56	2.2	0.25	0.1	43	150	1300	0.096
1N5264	60	2.1	0.25	0.1	46	170	1400	0.097
1N5265	62	2	0.25	0.1	47	185	1400	0.097
1N5266	68	1.8	0.25	0.1	52	230	1600	0.097
1N5267	75	1.7	0.25	0.1	56	270	1700	0.098