1N5221B THRU 1N5272B

SILICON PLANAR ZENER DIODES

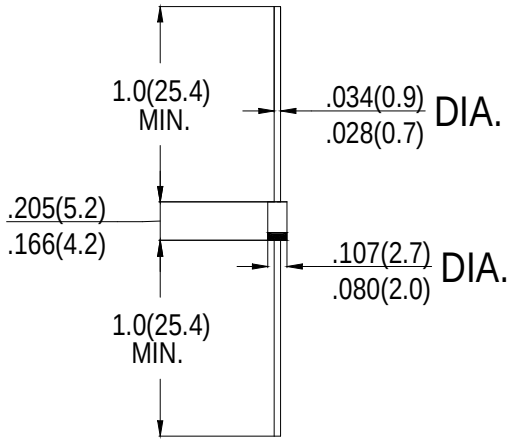
FEATURES

- Voltage Range: 2.7V to 110V
- Double siug type construction

MECHANICAL DATA

- ***Case***: Molded plastic
- ***Epoxy***: UL94V-0 rate flame retardant
- ***Lead***: MIL-STD- 202E, Method 208 guaranteed
- ***Polarity***:Color band denotes cathode end
- ***Mounting position***: Any
- ***Weight***: 0.33 grams

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

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

Absolute Maximum Ratings（T_a=25℃）

	SYMBOL	VALUE	units
Zener Current see Table “Characterstics”			
Power Dissipation at T_{amb}=25°C	P_{tot}	0.5[1)]	W
Junction Temperature	T_J	150	°C
[1)] Valid provided that leads at a distance of 8 mm form case are kept at ambient temperature.			

Characteristics at T_{amb}=25℃

	SYMBOL	Min.	Typ.	Max.	units
Forward Voltage at I_F=250mA	V_F	--	--	1.2	V
Valid provided that leads at a distance of 8 mm form case are kept at ambient temperature.					

SILICON PLANAR POWER ZENER DIODES

TYPE	Zener Voltage range[1]				Dynamic recsistance[3]			Reverse leakage current		Temp coefficient Zener Voltage
	V_{znom}[4]	I_{ZT} for V_{ZT}[2]			r_{ZJT}	R_{zjt} at I_{zk}		I_R[2] at V_R		TK_{VZ}
	V	mA	V		Ω	Ω	mA	μA	V	%/K
1N5221B	2.4	20	2.28	2.52	30	1200	0.25	100	1	-0.085…0
1N5222B	2.5	20	2.38	2.63	30	1250	0.25	100	1	-0.085…0
1N5223B	2.7	20	2.57	2.84	30	1300	0.25	75	1	-0.080…0
1N5224B	3.0	20	2.85	3.15	29	1600	0.25	50	1	-0.075…0
1N5225B	3.3	20	3.14	3.47	28	1600	0.25	25	1	-0.070…0
1N5226B	3.6	20	3.42	3.78	24	1700	0.25	15	1	-0.065…0
1N5227B	3.9	20	3.71	4.10	23	1900	0.25	10	1	-0.060…0
1N5228B	4.3	20	4.09	4.52	22	2000	0.25	5	1	-0.055…+0.055
1N5229B	4.7	20	4.47	4.94	19	1900	0.25	5	2	-0.030…+0.030
1N5230B	5.1	20	4.85	5.36	17	1600	0.25	5	2	-0.030…+0.030
1N5231B	5.6	20	5.32	5.88	11	1600	0.25	5	3	0…0.038
1N5232B	6	20	5.70	6.30	7	1600	0.25	5	3.5	0…0.038
1N5233B	6.2	20	5.89	6.51	7	1000	0.25	5	4	0…0.045
1N5234B	6.8	20	6.46	7.14	5	750	0.25	3	5	0…0.050
1N5235B	7.5	20	7.13	7.88	6	500	0.25	3	6	0…0.058
1N5236B	8.2	20	7.79	8.61	8	500	0.25	3	6.5	0…0.062
1N5237B	8.7	20	8.27	9.14	8	600	0.25	3	6.5	0…0.065
1N5238B	9.1	20	8.65	9.56	10	600	0.25	3	7	0…0.068
1N5239B	10	20	9.50	10.50	17	600	0.25	2	8	0…0.075
1N5240B	11	20	10.45	11.55	22	600	0.25	2	8.4	0…0.076
1N5241B	12	20	11.40	12.60	30	600	0.25	1	9.1	0…0.077
1N5242B	13	9.5	12.35	13.65	13	600	0.25	0.5	9.9	0…0.079
1N5243B	14	9	13.30	14.70	15	600	0.25	0.1	10	0…0.082
1N5244B	15	8.5	14.25	15.75	16	600	0.25	0.1	11	0…0.082
1N5245B	16	7.8	15.20	16.80	17	600	0.25	0.1	12	0…0.083
1N5246B	17	7.4	16.15	17.85	19	600	0.25	0.1	13	0…0.084
1N5247B	18	7	17.10	18.90	21	600	0.25	0.1	14	0…0.085
1N5248B	19	6.6	18.05	19.95	23	600	0.25	0.1	14	0…0.086
1N5249B	20	6.2	19.00	21.00	25	600	0.25	0.1	15	0…0.086
1N5250B	22	5.6	20.90	23.10	29	600	0.25	0.1	17	0…0.087
1N5251B	24	5.2	22.80	25.20	33	600	0.25	0.1	18	0…0.088
1N5252B	25	5	23.75	26.25	35	600	0.25	0.1	19	0…0.089
1N5253B	27	4.6	25.65	28.35	41	600	0.25	0.1	21	0…0.090
1N5254B	28	4.5	26.60	29.40	44	600	0.25	0.1	21	0…0.091
1N5255B	30	4.2	28.50	31.50	49	600	0.25	0.1	23	0…0.091
1N5256B	33	3.8	31.35	34.65	58	700	0.25	0.1	25	0…0.092
1N5257B	36	3.4	34.20	37.80	70	700	0.25	0.1	27	0…0.093

1N5258B	39	3.2	37.05	40.95	80	800	0.25	0.1	30	0…0.094
1N5259B	43	3	40.85	45.15	93	900	0.25	0.1	33	0…0.095
1N5260B	47	2.7	44.65	49.35	105	1000	0.25	0.1	36	0…0.095
1N5261B	51	2.5	48.45	53.55	125	1100	0.25	0.1	39	0…0.096
1N5262B	56	2.2	53.20	58.80	150	1300	0.25	0.1	43	0…0.096
1N5263B	60	2.1	57.00	63.00	170	1400	0.25	0.1	46	0…0.097
1N5264B	62	2	58.90	65.10	185	1400	0.25	0.1	47	0…0.097
1N5265B	68	1.8	64.60	71.40	230	1600	0.25	0.1	52	0…0.097
1N5266B	75	1.7	71.25	78.75	270	1700	0.25	0.1	56	0…0.098
1N5267B	82	1.5	77.90	86.10	330	2000	0.25	0.1	62	0…0.098
1N5268B	87	1.4	82.65	91.35	370	2200	0.25	0.1	68	0…0.099
1N5269B	91	1.4	86.45	95.55	400	2300	0.25	0.1	69	0…0.099
1N5270B	100	1.3	95.00	105.00	500	2600	0.25	0.1	76	0…0.110
1N5271B	110	1.1	104.50	115.50	750	3000	0.25	0.1	84	0…0.110
1N5272B	110	99	121	121	750	3000	0.25	0.1	84	0…0.110

[1] Tested with pulses tp=20 ms.

[2] Valid provided that leads are kept at ambient temperature at a distance of 8 mm form case.

[3]**ZENER IMPEDANCE (ZZ) DERIVATION:** ZZT and ZZK are measured by dividing the ac voltage drop across the device by the ac current applied. The specified limits are for IZ(ac) = 0.1 IZ(dc) with the ac frequency = 60 Hz.

[4]**ZENER VOLTAGE (VZ) MEASUREMENT:** Nominal zener voltage is measured with the device junction in thermal equilibrium at the lead temperature of 30°C ±1°C and 3/8, lead length.