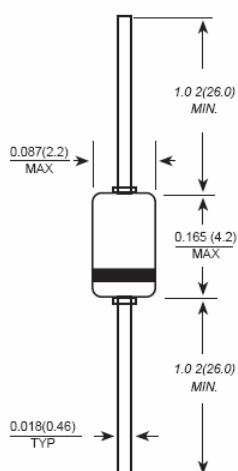


1N52-SERIES ZENER DIODES

Zener Voltage :2.4-200V Peak Pulse Power :500mW

DO-35(GLASS)



Dimensions in inches and (millimeters)

FEATURE

- ◆ Low zener impedance
- ◆ Low regulation factor
- ◆ Glass passivated junction
- ◆ High temperature soldering guaranteed:
260°C/10S/9.5mm lead length at 5 lbs tension
- ◆ This is a Pb - Free Device
- ◆ All SMC parts are traceable to the wafer lot
- ◆ Additional testing can be offered upon request

MECHANICAL DATA

Case: JEDEC DO-35(GLASS) molded glass body

Terminals: Plated axial leads, solderable per MIL-STD 750, method 2026

Polarity: Color band denotes cathode end

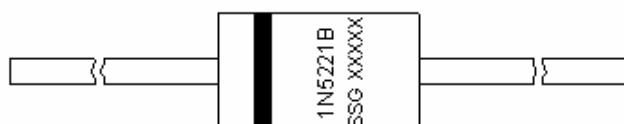
Mounting Position: Any

Weight: 0.05 ounce, 0.14 grams

Marking: Part Name, SSG and Date Code

MARKING DIAGRAM

Where XXXXX is YYWWL



1N5221B = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

ORDERING INFORMATION

Device	Package	Shipping
1N5221B-1N5281B	DO-35 (Pb-Free)	5000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	VALUE	UNITS
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25°C(Note 1)	P _{tot}	500	mW
Junction Temperature	T _j	200	°C
Storage Temperature Range	T _{stg}	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	R _{θJA}	0.3	K/mW
Forward voltage at I _F =200mA	V _F	1.1	V

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature



ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

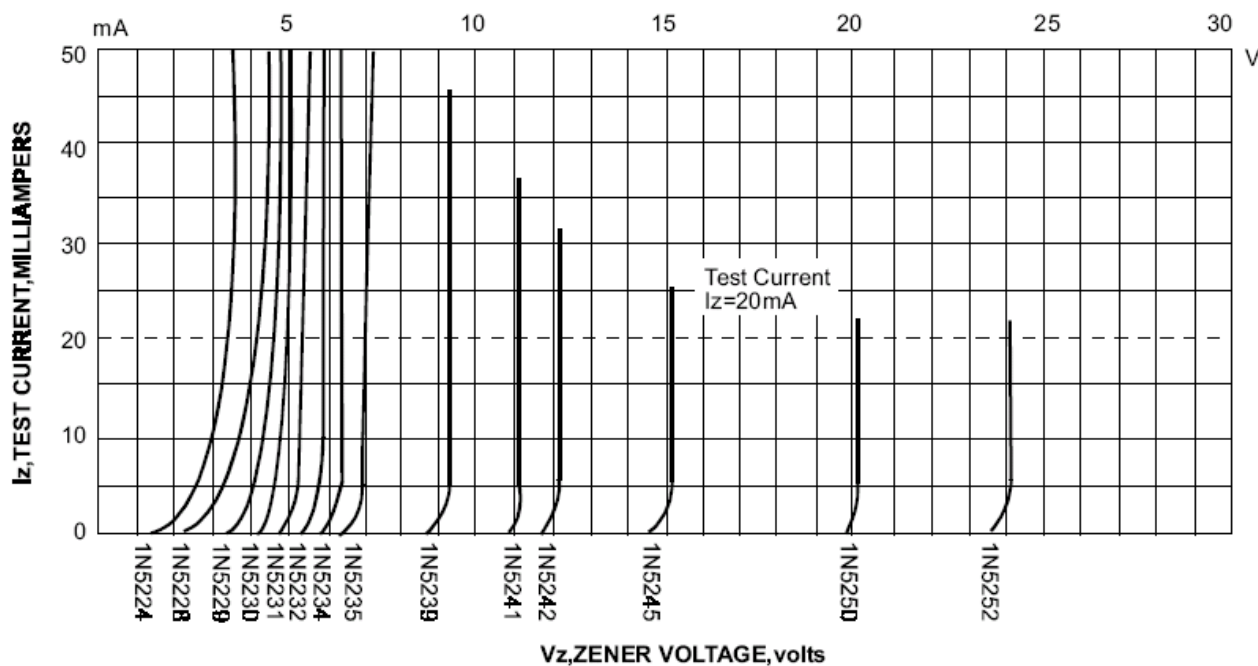
Part No.	Nominal	Test	Max. Zener Impedance		Max. Reverse Leakage Current			Max.ZenerVoltage Temp. Coeff
	Zener Voltage	Current	ZzT @ IzT Ohms	Zzk @ Izk=0.25mA Ohms	Ir μA	@Vr Volts		
	Vz @ IzT Volts	IzT mA				A	B,C&D	
1N5221B	2.4	20	30	1200	100	0.95	1.0	-0.085
1N5222B	2.5	20	30	1250	100	0.95	1.0	-0.085
1N5223B	2.7	20	30	1300	75	0.95	1.0	-0.080
1N5224B	2.8	20	30	1400	75	0.95	1.0	-0.080
1N5225B	3.0	20	29	1600	50	0.95	1.0	-0.075
1N5226B	3.3	20	28	1600	25	0.95	1.0	-0.070
1N5227B	3.6	20	24	1700	15	0.95	1.0	-0.065
1N5228B	3.9	20	23	1900	10	0.95	1.0	-0.060
1N5229B	4.3	20	22	2000	5.0	0.95	1.0	±0.055
1N5230B	4.7	20	19	1900	5.0	1.9	2.0	±0.030
1N5231B	5.1	20	17	1600	5.0	1.9	2.0	±0.030
1N5232B	5.6	20	11	1600	5.0	2.9	3.0	+0.038
1N5233B	6.0	20	7.0	1600	5.0	3.3	3.5	+0.038
1N5234B	6.2	20	7.0	1000	5.0	3.8	4.0	+0.045
1N5235B	6.8	20	5.0	750	3.0	4.8	5.0	+0.050
1N5236B	7.5	20	6.0	500	3.0	5.7	6.0	+0.058
1N5237B	8.2	20	8.0	500	3.0	6.2	6.5	+0.062
1N5238B	8.7	20	8.0	600	3.0	6.2	6.5	+0.065
1N5239B	9.1	20	10	600	3.0	6.7	7.0	+0.068
1N5240B	10	20	17	600	3.0	7.6	8.0	+0.075
1N5241B	11	20	22	600	2.0	8.0	8.4	+0.076
1N5242B	12	20	30	600	1.0	8.7	9.1	+0.077
1N5243B	13	9.5	13	600	0.5	9.4	9.9	+0.079
1N5244B	14	9.0	15	600	0.1	9.5	10	+0.082
1N5245B	15	8.5	16	600	0.1	10.5	11	+0.082
1N5246B	16	7.8	17	600	0.1	11.4	12	+0.083
1N5247B	17	7.4	19	600	0.1	12.4	13	+0.084
1N5248B	18	7.0	21	600	0.1	13.3	14	+0.085
1N5249B	19	6.6	23	600	0.1	13.3	14	+0.086
1N5250B	20	6.2	25	600	0.1	14.3	15	+0.086
1N5251B	22	5.6	29	600	0.1	16.2	17	+0.087
1N5252B	24	5.2	33	600	0.1	17.1	18	+0.088
1N5253B	25	5.0	35	600	0.1	18.1	19	+0.089
1N5254B	27	4.6	41	600	0.1	20	21	+0.090
1N5255B	28	4.5	44	600	0.1	20	21	+0.091
1N5256B	30	4.2	49	600	0.1	22	23	+0.091
1N5257B	33	3.8	58	700	0.1	24	25	+0.092
1N5258B	36	3.4	70	700	0.1	26	27	+0.093
1N5259B	39	3.2	80	800	0.1	29	30	+0.094
1N5260B	43	3.0	93	900	0.1	31	33	+0.095
1N5261B	47	2.7	105	1000	0.1	34	36	+0.095
1N5262B	51	2.5	125	1100	0.1	37	39	+0.096
1N5263B	56	2.2	150	1300	0.1	41	43	+0.096
1N5264B	60	2.1	170	1400	0.1	44	46	+0.097
1N5265B	62	2.0	185	1400	0.1	45	47	+0.097
1N5266B	68	1.8	230	1600	0.1	49	52	+0.097
1N5267B	75	1.7	270	1700	0.1	53	56	+0.097
1N5268B	82	1.5	330	2000	0.1	59	62	+0.098
1N5269B	87	1.4	370	2200	0.1	65	68	+0.099
1N5270B	91	1.4	400	2300	0.1	66	69	+0.099
1N5271B	100	1.3	500	2600	0.1	72	76	+0.110
1N5272B	110	1.1	750	3000	0.1	80	84	+0.110
1N5273B	120	1.0	900	4000	0.1	86	91	+0.110
1N5274B	130	0.95	1100	4500	0.1	94	99	+0.110
1N5275B	140	0.90	1300	4500	0.1	101	106	+0.110
1N5276B	150	0.85	1500	5000	0.1	108	114	+0.110
1N5277B	160	0.80	1700	5500	0.1	116	122	+0.110
1N5278B	170	0.74	1900	5500	0.1	123	129	+0.110
1N5279B	180	0.68	2200	6000	0.1	130	137	+0.110
1N5280B	190	0.68	2400	6500	0.1	137	144	+0.110
1N5281B	200	0.65	2500	7000	0.1	144	152	+0.110

Note: 1. SUFFIX "B" Indicates ±5% Tolerance.
2. NO SUFFIX "B" Indicates ±10% Tolerance.



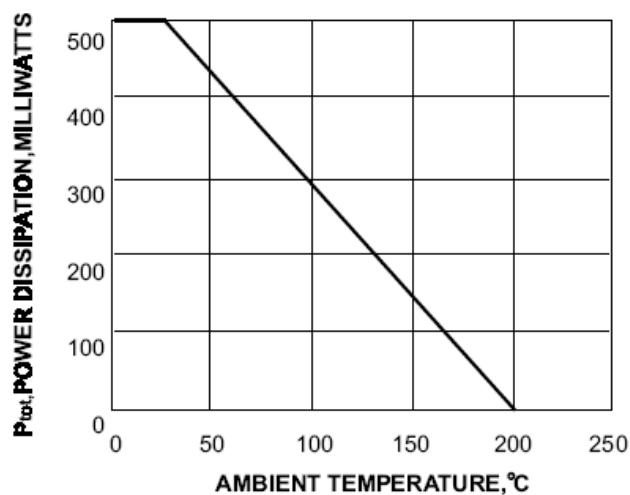
RATINGS AND CHARACTERISTIC CURVES 1N52 SERIES

Breakdown characteristics



Admissible power dissipation versus ambient temperature

Valid provided that leads are kept at ambient temperature at a distance of 10mm from case



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