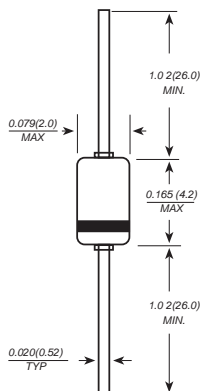


# 1N52-SERIES

## ZENER DIODES

Zener Voltage: 2.4-56V 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

### 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

### 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 <sub>tot</sub>	500	mW
Junction Temperature	T <sub>j</sub>	200	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	R <sub>qJA</sub>	0.3	K/mW
Forward voltage at I <sub>F</sub> =200mA	V <sub>F</sub>	1.1	V

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

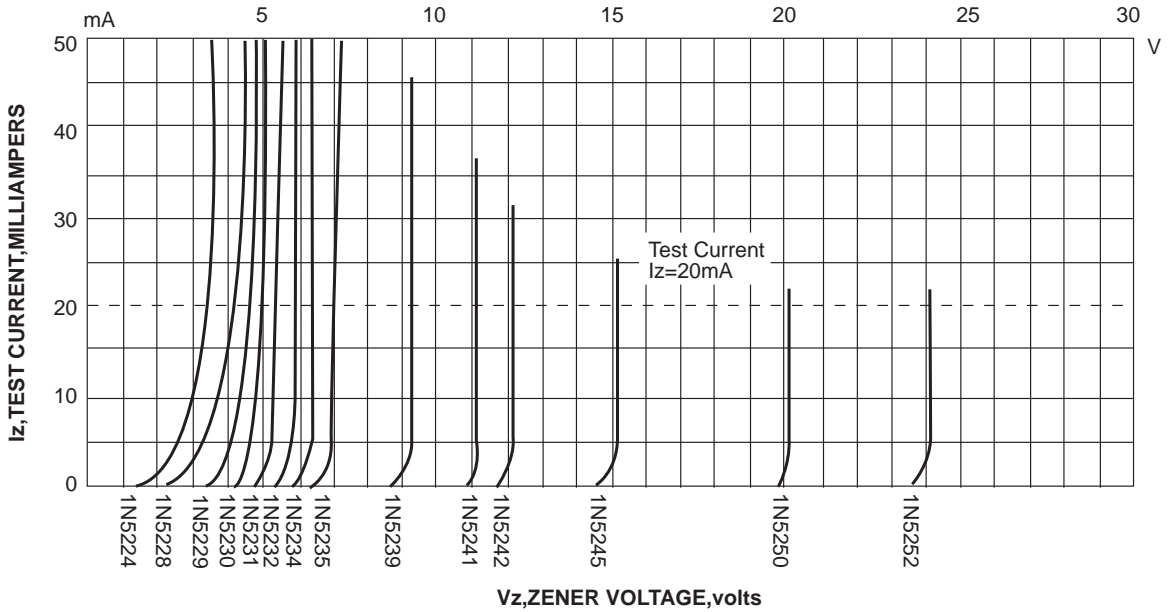
## ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

Device Type	Nominal Zener Voltage Vz@IzT (Volts)	Test Current IzT (mA)	Maximum Zener Impedance		Maximum Reverse Leakage Current		Typical Temperature Coefficient (%/°C)	Maximum Regulator Current IzM (mA)
			ZzT@IzT	ZzK@Izk=0.25mA	I <sub>R</sub>	@V <sub>R</sub>		
			Ohms	Ohms	μA	Volts		
1N5221B	2.4	20	30	1200	100	1.0	-0.085	191
1N5222B	2.5	20	30	1250	100	1.0	-0.085	182
1N5223B	2.7	20	30	1300	75	1.0	-0.080	168
1N5224B	2.8	20	30	1400	75	1.0	-0.080	162
1N5225B	3.0	20	29	1600	50	1.0	-0.075	151
1N5226B	3.3	20	28	1600	25	1.0	-0.070	138
1N5227B	3.6	20	24	1700	15	1.0	-0.065	126
1N5228B	3.9	20	23	1900	10	1.0	-0.060	115
1N5229B	4.3	20	22	2000	5.0	1.0	±0.055	106
1N5230B	4.7	20	19	1900	5.0	2.0	±0.030	97
1N5231B	5.1	20	17	1600	5.0	2.0	±0.030	89
1N5232B	5.6	20	11	1600	5.0	3.0	+0.038	81
1N5233B	6.0	20	7	1600	5.0	3.5	+0.038	76
1N5234B	6.2	20	7	1000	5.0	4.0	+0.045	73
1N5235B	6.8	20	5	750	3.0	5.0	+0.050	67
1N5236B	7.5	20	6	500	3.0	6.0	+0.058	61
1N5237B	8.2	20	8	500	3.0	6.5	+0.062	55
1N5238B	8.7	20	8	600	3.0	6.5	+0.065	52
1N5239B	9.1	20	10	600	3.0	7.0	+0.068	50
1N5240B	10	20	17	600	3.0	8.0	+0.075	45
1N5241B	11	20	22	600	2.0	8.4	+0.076	41
1N5242B	12	20	30	600	1.0	9.1	+0.077	38
1N5243B	13	9.5	13	600	0.5	9.9	+0.079	35
1N5244B	14	9.0	15	600	0.1	10	+0.082	32
1N5245B	15	8.5	16	600	0.1	11	+0.082	30
1N5246B	16	7.8	17	600	0.1	12	+0.083	28
1N5247B	17	7.4	19	600	0.1	13	+0.084	27
1N5248B	18	7.0	21	600	0.1	14	+0.085	25
1N5249B	19	6.6	23	600	0.1	14	+0.085	24
1N5250B	20	6.2	25	600	0.1	15	+0.086	23
1N5251B	22	5.6	29	600	0.1	17	+0.087	21.2
1N5252B	24	5.2	33	600	0.1	18	+0.088	19.1
1N5253B	25	5.0	35	600	0.1	19	+0.089	18.2
1N5254B	27	4.6	41	600	0.1	21	+0.090	16.8
1N5255B	28	4.5	44	600	0.1	21	+0.091	16.2
1N5256B	30	4.2	49	600	0.1	23	+0.091	15.1
1N5257B	33	3.8	58	700	0.1	25	+0.092	13.8
1N5258B	36	3.4	70	700	0.1	27	+0.093	12.6
1N5259B	39	3.2	80	800	0.1	30	+0.094	11.5
1N5260B	43	3.0	93	900	0.1	33	+0.095	10.6
1N5261B	47	2.7	150	1000	0.1	36	+0.095	9.7
1N5262B	51	2.5	125	1100	0.1	39	+0.096	8.9
1N5263B	56	2.2	150	1300	0.1	43	+0.096	8.1

Note 1: Suffix "B" indicate ±5% 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

