

Features

- 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 Date

- **Case:** JEDEC DO-35 (GLASS) molded glass body
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Terminals:** Plated axial leads, solderable per MIL-STD 750, method 2026
- **Weight:** 0.05 ounce, 0.14 grams

Major Ratings and Characteristics

P_{tot}	500mW
VF	1.1V
$T_j \text{ max.}$	150°C

Maximum Ratings & Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load, derate current by 20%.

Items	Symbol	VALUE	UNIT
Zener Current see Table Characteristics			
Power Dissipation at $T_{amb}=25^\circ\text{C}^{(1)}$	P_{tot}	500	mW
Forward voltage at $I_F=200\text{mA}$	V_F	1.1	V
Thermal resistance from junction to ambient	$R_{\theta JA}$	0.3	K/mW
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

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

Electrical Characteristics ($T_A=25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Device Type ⁽²⁾	Nominal Zener Voltage $V_Z@I_{ZT}$ (Volts)	Current I_{ZT} (mA)	Maximum Zener Impedance		Maximum Reverse Leakage Current		Typical Temperature Coeffici (%/ $^{\circ}\text{C}$)	Maximum Regulator Current I_{ZM} mA
			$Z_{ZT}@I_{ZT}$	$ZZK@I_{ZK}=0.25\text{mA}$	$I_R@V_R$	V_R		
			Ohms	Ohms	mA	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	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	10	1.0	-0.065	126
1N5228B	3.9	20	23	1900	5.0	1.0	-0.060	115
1N5229B	4.3	20	22	2000	5.0	2.0	± 0.055	106
1N5230B	4.7	20	19	1900	5.0	2.0	± 0.030	97
1N5231B	5.1	20	17	1600	5.0	3.0	± 0.030	89
1N5232B	5.6	20	11	1600	5.0	3.5	+0.038	81
1N5233B	6	20	7	1600	5.0	4.0	+0.038	76
1N5234B	6.2	20	7	1000	5.0	5.0	+0.045	73
1N5235B	6.8	20	5	750	3.0	6.0	+0.050	67
1N5236B	7.5	20	6	500	3.0	6.5	+0.058	61
1N5237B	8.2	20	8	500	3.0	6.5	+0.062	55
1N5238B	8.7	20	8	600	3.0	7.0	+0.065	52
1N5239B	9.1	20	10	600	3.0	8.0	+0.068	50
1N5240B	10	20	17	600	3.0	8.4	+0.075	45
1N5241B	11	20	22	600	2.0	9.1	+0.076	41
1N5242B	12	20	30	600	1.0	9.9	+0.077	38
1N5243B	13	9.5	13	600	0.5	10	+0.079	35
1N5244B	14	9.0	15	600	0.1	11	+0.082	32
1N5245B	15	8.5	16	600	0.1	12	+0.082	30
1N5246B	16	7.8	17	600	0.1	13	+0.083	28
1N5247B	17	7.4	19	600	0.1	14	+0.084	27
1N5248B	18	7.0	21	600	0.1	14	+0.085	25
1N5249B	19	6.6	23	600	0.1	15	+0.085	24
1N5250B	20	6.2	25	600	0.1	16	+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 2: Suffix "B" indicate +5% tolerance

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Breakdown Characteristics

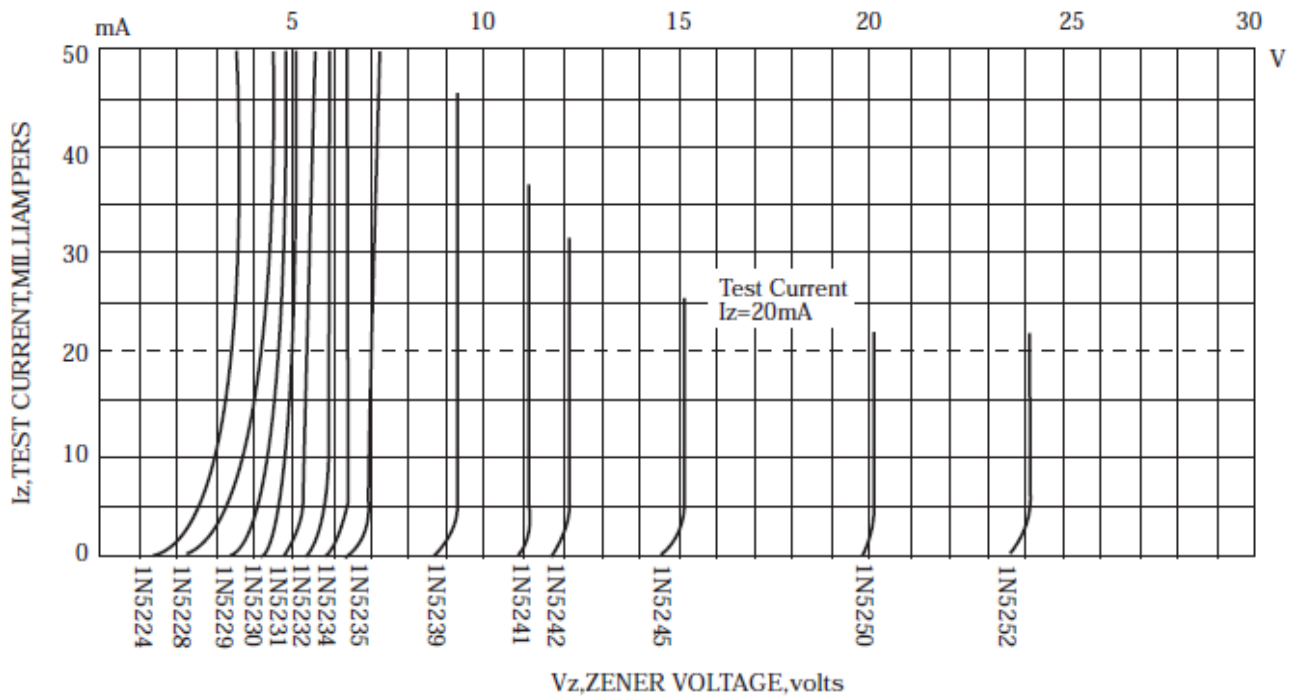
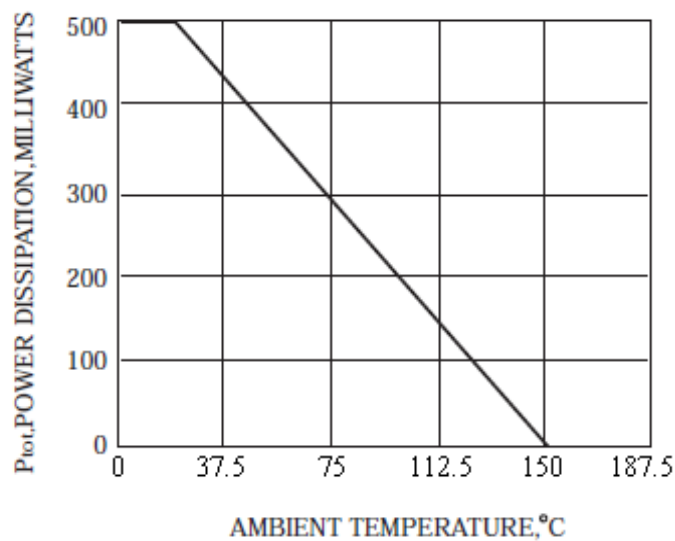
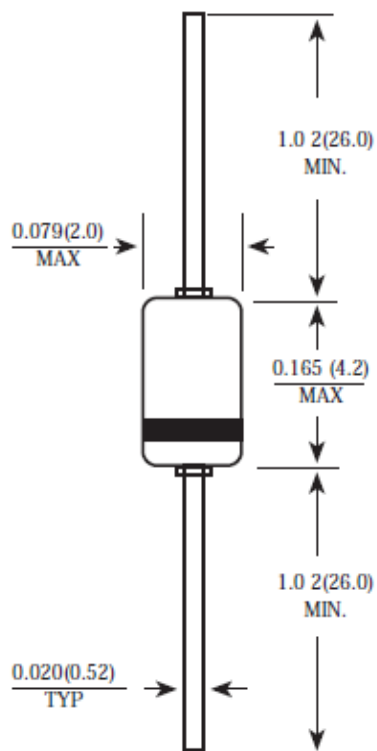


Fig.2 Power Derating Curve



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

Package Outline**DO-35(GLASS)**

Dimensions in inches and (millimeters)