

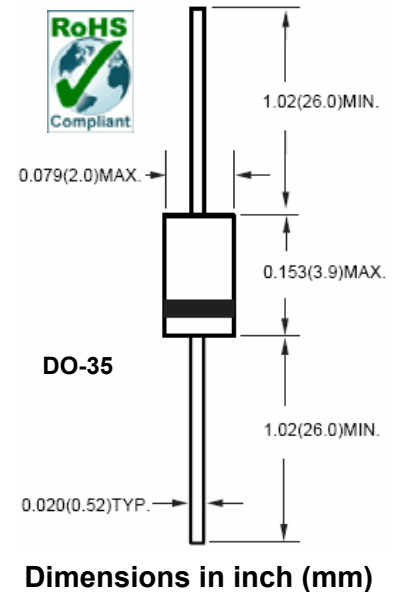
## Zener Diodes

### Features

- Planar Die construction
- 500mW Power Dissipation
- Standard Zener Voltage Tolerance is  $\pm 5\%$
- Ideally Suited for Automated Assembly Processes
- RoHS compliant

### Mechanical Data

<b>Case:</b>	DO-35, Molded Glass
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-202G, Method 208,
<b>Polarity:</b>	Cathode end indicated by color band
<b>Weight:</b>	0.13 grams



### Maximum Ratings & Electrical Characteristics

( $T_{Ambient}=25^{\circ}C$  unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
<b>PD</b>	Power Dissipation above 25° C	500	mW	
<b>VF</b>	Forward Voltage	1.1	V	IF= 200mA
<b>TJ</b>	Max. Junction Temperature	175	° C	
<b>TSTG</b>	Storage Temperature Range	-65 to +175	° C	

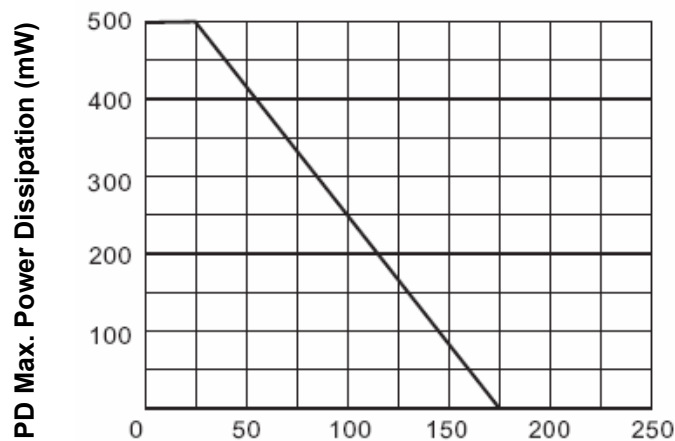
## 1N5221B~1N5261B

P/N	Normal Zener Voltage				Maximum Zener impedance			Maximum reverse leakage current	
	VZ @ IZT				ZZT @ IZT	Zzk @ Izk		IR @ VR	
	Nom. VZ	Min. VZ	Max. VZ	IZT (mA)	$\Omega$	$\Omega$	mA	$\mu$ A	VR
1N5221B	2.4	2.28	2.52	20.0	30	1200	0.25	100	1.0
1N5222B	2.5	2.38	2.63	20.0	30	1250	0.25	100	1.0
1N5223B	2.7	2.57	2.84	20.0	30	1300	0.25	75	1.0
1N5224B	2.8	2.66	2.94	20.0	30	1400	0.25	75	1.0
1N5225B	3.0	2.85	3.15	20.0	29	1600	0.25	50	1.0
1N5226B	3.3	3.14	3.47	20.0	28	1600	0.25	25	1.0
1N5227B	3.6	3.42	3.78	20.0	24	1700	0.25	15	1.0
1N5228B	3.9	3.71	4.10	20.0	23	1900	0.25	10	1.0
1N5229B	4.3	4.09	4.52	20.0	22	2000	0.25	5.0	1.0
1N5230B	4.7	4.47	4.94	20.0	19	1900	0.25	5.0	2.0
1N5231B	5.1	4.85	5.36	20.0	17	1600	0.25	5.0	2.0
1N5232B	5.6	5.32	5.88	20.0	11	1600	0.25	5.0	3.0
1N5233B	6.0	5.70	6.30	20.0	7	1600	0.25	5.0	3.5
1N5234B	6.2	5.89	6.51	20.0	7	1000	0.25	5.0	4.0
1N5235B	6.8	6.46	7.14	20.0	5	750	0.25	3.0	5.0
1N5236B	7.5	7.13	7.88	20.0	6	500	0.25	3.0	6.0
1N5237B	8.2	7.79	8.61	20.0	8	500	0.25	3.0	6.5
1N5238B	8.7	8.27	9.14	20.0	8	600	0.25	3.0	6.5
1N5239B	9.1	8.65	9.56	20.0	10	600	0.25	3.0	7.0
1N5240B	10.0	9.50	10.50	20.0	17	600	0.25	3.0	8.0
1N5241B	11.0	10.45	11.55	20.0	22	600	0.25	2.0	8.4
1N5242B	12.0	11.40	12.60	20.0	30	600	0.25	1.0	9.1
1N5243B	13.0	12.35	13.65	9.5	13	600	0.25	0.5	9.9
1N5244B	14.0	13.30	14.70	9.5	15	600	0.25	0.1	10.0
1N5245B	15.0	14.25	15.75	8.5	16	600	0.25	0.1	11.0
1N5246B	16.0	15.20	16.80	7.8	17	600	0.25	0.1	12.0
1N5247B	17.0	16.15	17.85	7.4	19	600	0.25	0.1	13.0
1N5248B	18.0	17.10	18.90	7.0	21	600	0.25	0.1	14.0
1N5249B	19.0	18.05	19.95	6.6	23	600	0.25	0.1	14.0

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	VZ @ IZT				ZzT @ IZT	Zzk @ Izk		IR @ VR	
	Nom. VZ	Min. VZ	Max. VZ	IZT (mA)	$\Omega$	$\Omega$	mA	$\mu$ A	VR
1N5250B	20.0	19.00	21.00	6.2	25	600	0.25	0.1	15.0
1N5251B	22.0	20.90	23.10	5.6	29	600	0.25	0.1	17.0
1N5252B	24.0	22.80	25.20	5.2	33	600	0.25	0.1	18.0
1N5253B	25.0	23.75	26.25	5.0	35	600	0.25	0.1	19.0
1N5254B	27.0	25.65	28.35	4.6	41	600	0.25	0.1	21.0
1N5255B	28.0	26.60	29.40	4.5	44	600	0.25	0.1	21.0
1N5256B	30.0	28.50	31.50	4.2	49	600	0.25	0.1	23.0
1N5257B	33.0	31.35	34.65	3.8	58	700	0.25	0.1	25.0
1N5258B	36.0	34.20	37.80	3.4	70	700	0.25	0.1	27.0
1N5259B	39.0	37.05	40.95	3.2	80	800	0.25	0.1	30.0
1N5260B	43.0	40.85	45.15	3.0	93	900	0.25	0.1	33.0
1N5261B	47.0	44.65	49.35	2.7	105	1000	0.25	0.1	36.0

### Characteristics Curves



Ambient Temperature Ta (°C)

Fig.1 Power Derating Curve

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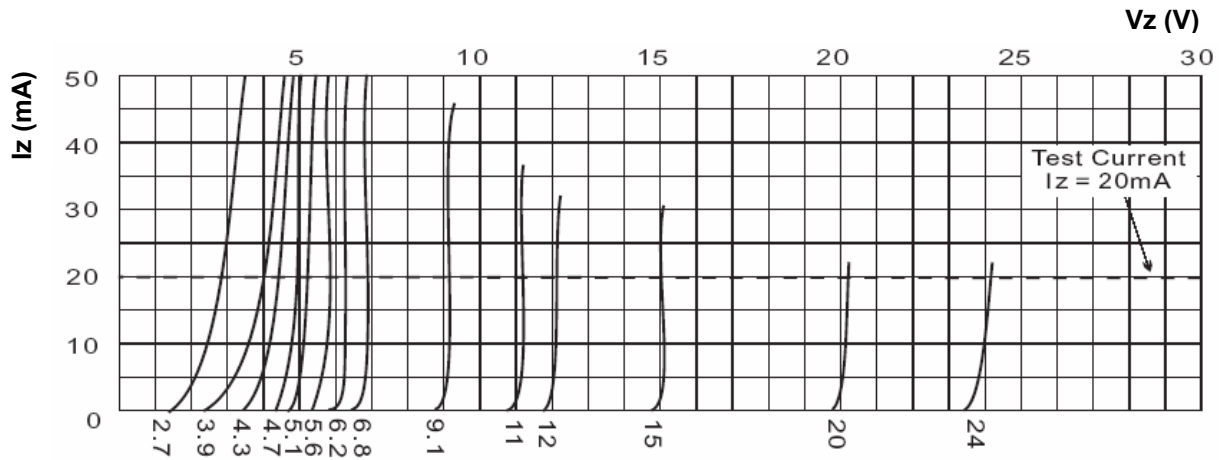


Fig.2 BREAKDOWN CHARACTERISTICS

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