

**SEMICONDUCTOR**

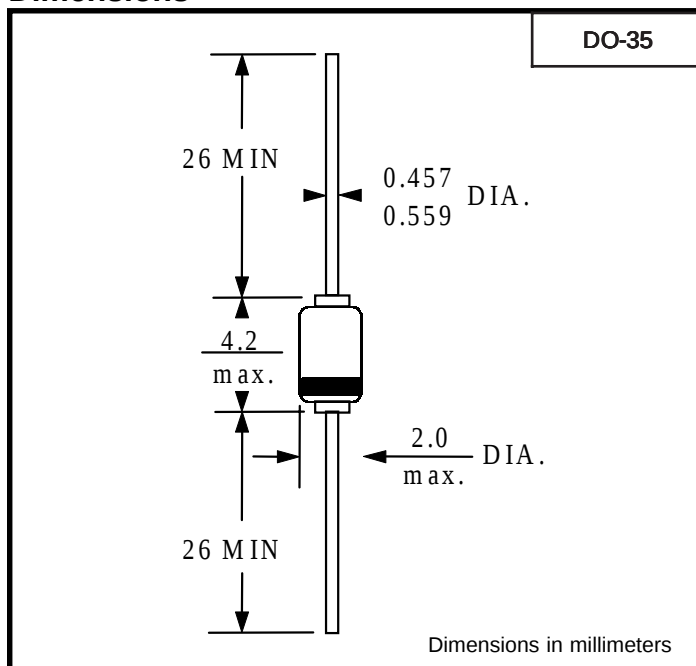
TECHNICAL SPECIFICATION

**1N5223B
THRU
1N5261B****500mW 5% DO-35 ZENER DIODE****Absolute Maximum Ratings (Ta=25°C)**

Items	Symbol	Ratings	Unit
Power Dissipation	P_{TOT}	500	mW
Power Derating (above 75 °C)		4.0	mW/°C
Forward Voltage @If = 10 mA	Vf	1.2	V
Vz Tolerance		5	%
Junction Temp.	T _J	-65 to 175	°C
Storage Temp.	T _{STG}	-65 to 175	°C

Mechanical Data

Items	Materials
Package	DO-35
Case	Hermetically sealed glass
Lead/Finish	Double Stud/Solder Plating
Chip	Glass Passivated

Dimensions**Electrical Characteristics (Ta=25°C)**

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE Izt = 0.25mA	MAXIMUM REVERSE CURRENT		TEMP. COEFF.
	Vz(V)	Izt(mA)	Rz (ohms)	Izt(mA0)	Rz (ohms)	VR (V)	IR (uA)	dvz (%/ °C)
1N5223B	2.7	20	30	20	1300	1.0	75	-0.080
1N5224B	2.8	20	30	20	1400	1.0	75	-0.080
1N5225B	3.0	20	29	20	1600	1.0	50	-0.075
1N5226B	3.3	20	28	20	1600	1.0	25	-0.070
1N5227B	3.6	20	24	20	1700	1.0	15	-0.065
1N5228B	3.9	20	23	20	1900	1.0	10	-0.060
1N5229B	4.3	20	22	20	2000	1.0	5	+/-0.055
1N5230B	4.7	20	19	20	1900	2.0	5	+/-0.030
1N5231B	5.1	20	17	20	1600	2.0	5	+/-0.030
1N5232B	5.6	20	11	20	1600	3.0	5	+/-0.038
1N5233B	6.0	20	7	20	1600	3.5	5	+/-0.038
1N5234B	6.2	20	7	20	1000	4.0	5	+0.045
1N5235B	6.8	20	5	20	750	5.6	3	+0.050

Electrical Characteristics (Ta=25°C)

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE Izt = 0.25mA	MAXIMUM REVERSE CURRENT		TEMP. COEFF.
	Vz(V)	Izt(mA)	Rz (ohms)	Izt(mA0	Rz (ohms)	VR (V)	IR (uA)	dvz (%/ °C)
1N5236B	7.5	20	6	20	500	6.0	3.0	+0.058
1N5237B	8.2	20	8	20	500	6.5	3.0	+0.062
1N5238B	8.7	20	8	20	600	6.5	3.0	+0.065
1N5239B	9.1	20	10	20	600	7.0	3.0	+0.068
1N5240B	10	20	17	20	600	8.0	3.0	+0.075
1N5241B	11	20	22	20	600	8.4	2.0	+0.076
1N5242B	12	20	30	20	600	9.1	1.0	+0.077
1N5243B	13	9.5	13	9.5	600	9.9	0.5	+0.079
1N5244B	14	9.0	15	9.0	600	10	0.1	+0.082
1N5245B	15	8.5	16	8.5	600	11	0.1	+0.082
1N5246B	16	7.8	17	7.8	600	12	0.1	+0.083
1N5247B	17	7.4	19	7.4	600	13	0.1	+0.084
1N5248B	18	7.0	21	7.0	600	14	0.1	+0.085
1N5249B	19	6.6	23	6.6	600	14	0.1	+0.086
1N5250B	20	6.2	25	6.2	600	15	0.1	+0.086
1N5251B	22	5.6	29	5.6	600	17	0.1	+0.087
1N5252B	24	5.2	33	5.2	600	18	0.1	+0.088
1N5253B	25	5.0	35	5.0	600	19	0.1	+0.089
1N5254B	27	4.6	41	4.6	600	21	0.1	+0.090
1N5255B	28	4.5	44	4.5	600	21	0.1	+0.091
1N5256B	30	4.2	49	4.2	600	23	0.1	+0.091
1N5257B	33	3.8	58	3.8	700	25	0.1	+0.092
1N5258B	36	3.4	70	3.4	700	27	0.1	+0.093
1N52459B	39	3.2	80	3.2	800	30	0.1	+0.094
1N5260B	43	3.0	93	3.0	900	33	0.1	+0.095
1N5261B	47	2.7	105	2.7	1000	36	0.1	+0.095

Notes:

- The Electrical characteristics are measured after allowinh the device to stabilize for 20 sec. when mounted with a 3/8" minimum lead length from the case.
- Temperature Coefficient (dvz)
 - Izt= 7.5ma, T1= 25°C, T2= 125°C (1N5223B - 1N5242B)
 - Izt= rated Izt, T1= 25°C, T2= 125°C (1N5243B - 1N5261B)