

Zeners 1N5985B - 1N6025B

Absolute Maximum Ratings * T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P _D	Power Dissipation @ T _L ≤ 75°C, Lead Length = 3/8"	500	mW
	Derate above 75°C	4.0	mW/°C
T _J , T _{STG}	Operating and Storage Temperature Range	-65 to +200	°C

* These ratings are limiting values above which the serviceability of the diode may be impaired.

Tolerance = 5%



Electrical Characteristics T_A = 25°C unless otherwise noted

Device	V _Z (V) @ I _Z (Note 1)	Test Current I _Z (mA)	Zener Impedance		leakage Current		I _{ZM} (mA) (Note 2)
			Z _Z @ I _Z (Ω)	Z _{ZK} @ I _{ZK} = 250μA (Ω)	I _R (mA)	V _R (V)	
1N5985B	2.4	5	100	1800	100	1	208
1N5986B	2.7	5	100	1900	75	1	185
1N5987B	3.0	5	95	2000	50	1	167
1N5988B	3.3	5	95	2200	25	1	152
1N5989B	3.6	5	90	2300	15	1	139
1N5990B	3.9	5	90	2400	10	1	128
1N5991B	4.3	5	88	2500	5	1	116
1N5992B	4.7	5	70	2200	3	1.5	106
1N5993B	5.1	5	50	2050	2	2	98
1N5994B	5.6	5	25	1800	2	3	89
1N5995B	6.2	5	10	1300	1	4	81
1N5996B	6.8	5	8	750	1	5.2	74
1N5997B	7.5	5	7	600	0.5	6	67
1N5998B	8.2	5	7	600	0.5	6.5	61
1N5999B	9.1	5	10	600	0.1	7	55
1N6000B	10	5	15	600	0.1	8	50
1N6001B	11	5	18	600	0.1	8.4	45
1N6002B	12	5	22	600	0.1	9.1	42
1N6003B	13	5	25	600	0.1	9.9	38
1N6004B	15	5	32	600	0.1	11	33
1N6005B	16	5	36	600	0.1	12	31
1N6006B	18	5	42	600	0.1	14	28
1N6007B	20	5	48	600	0.1	15	25
1N6008B	22	5	55	600	0.1	17	23
1N6009B	24	5	62	600	0.1	18	21
1N6010B	27	5	70	600	0.1	21	19
1N6011B	30	5	78	600	0.1	23	17
1N6012B	33	5	88	700	0.1	25	15
1N6013B	36	5	95	700	0.1	27	14
1N6014B	39	2	130	800	0.1	30	13

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

Device	V_Z (V) @ I_Z	Test Current I_Z (mA)	Zener Impedance		leakage Current		I_{ZM} (mA) (Note 2)
			Z_Z @ I_Z (Ω)	Z_{ZK} @ $I_{ZK} = 250\mu\text{A}$ (Ω)	I_R (mA)	V_R (V)	
1N6015B	43	2	150	900	0.1	33	12
1N6016B	47	2	170	1000	0.1	36	11
1N6017B	51	2	180	1300	0.1	39	9.8
1N6018B	56	2	200	1400	0.1	43	8.9
1N6019B	62	2	225	1400	0.1	47	8
1N6020B	68	2	240	1600	0.1	52	7.4
1N6021B	75	2	265	1700	0.1	56	6.7
1N6022B	82	2	280	2000	0.1	62	6.1
1N6023B	91	2	300	2300	0.1	69	5.5
1N6024B	100	1	500	2600	0.1	76	5
1N6025B	110	1	650	3000	0.1	84	4.5

V_F Forward Voltage = 1.2V Max @ $I_F = 200\text{mA}$

Notes:

1. Zener Voltage (V_Z)
The zener voltage is measured with the device junction in the thermal equilibrium at the lead temperature (T_L) at $30^{\circ}\text{C} \pm 1^{\circ}\text{C}$ and 3/8" lead length.
2. Maximum Zener Current Ratings (I_{ZM})
The maximum current handling capability on a worst case basis is limited by the actual zener voltage at the operation point and the power derating curve.

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