

ZENER DIODES

1N746 Series • 400 mWatt Glass Zener Diodes in DO-35 & LL-34/35 Packages

Type	Nominal Zener Voltage (V _Z) @ I _{Z1} Volts	Maximum Zener Impedance (Z _{Z1}) @ I _{Z1} Ohms	Test Current I _{Z1} mA	Typical Temperature Coefficient %/°C	Maximum Reverse Leakage Current (I _R) @ V _R = 1 V		Maximum Regulator Current (I _{ZM}) mA
					25°C μA	150°C μA	
1N746A ✓	3.3	28	20	-0.062	10	30	110
1N747A ✓	3.6	24	20	-0.055	10	30	100
1N748A ✓	3.9	23	20	-0.049	10	30	95
1N749A ✓	4.3	22	20	-0.036	2	30	85
1N750A ✓	4.7	19	20	-0.018	2	30	75
1N751A ✓	5.1	17	20	-0.008	1	20	70
1N752A ✓	5.6	11	20	0.006	1	20	65
1N753A ✓	6.2	7	20	0.022	0.1	20	60
1N754A ✓	6.8	5	20	0.035	0.1	20	55
1N755A ✓	7.5	6	20	0.045	0.1	20	50
1N756A ✓	8.2	8	20	0.052	0.1	20	45
1N757A ✓	9.1	10	20	0.056	0.1	20	40
1N758A ✓	10.0	17	20	0.060	0.1	20	35
1N759A ✓	12.0	30	20	0.060	0.1	20	30

Voltage tolerance is ± 5%. Non- suffix is ± 10% tolerance.

Other tolerances, non-standard and higher zener voltages upon request.

For MELF surface mount package, replace "1N" prefix with "LL".

1N957 Series • 400 mWatt Glass Zener Diodes in DO-35 & LL-34/35 Packages

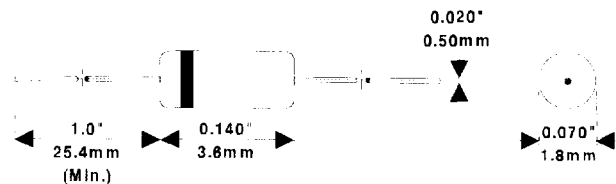
Type	Nominal Zener Voltage (V _Z) @ I _{Z1} Volts	Test Current I _{Z1} mA	Maximum Zener Impedance		I _{ZK} mA	Typical Temperature Coefficient %/°C	Maximum Reverse Leakage Current		Maximum Regulator Current (I _{ZM}) mA
			(Z _{Z1}) @ I _{Z1} Ohms	(Z _{ZK}) @ I _{ZK} Ohms			(I _R) μA	@ V _R Volts	
1N957B	6.8	18.5	4.5	700	1.0	0.050	150	5.2	55
1N958B	7.5	16.5	5.5	700	0.5	0.058	75	5.7	50
1N959B	8.2	15.0	6.5	700	0.5	0.062	50	6.2	45
1N960B	9.1	14.0	7.5	700	0.5	0.068	25	6.9	41
1N961B	10	12.5	8.5	700	0.25	0.075	10	7.6	38
1N962B ✓	11	11.5	9.5	700	0.25	0.076	5	8.4	35
1N963B ✓	12	10.5	11.5	700	0.25	0.077	5	9.1	32
1N964B ✓	13	9.5	13	700	0.25	0.079	5	9.9	30
1N965B ✓	15	8.5	16	700	0.25	0.082	5	11.4	26
1N966B ✓	16	7.8	17	700	0.25	0.083	5	12.2	25
1N967B ✓	18	7.0	21	750	0.25	0.085	5	13.7	21
1N968B ✓	20	6.2	25	750	0.25	0.086	5	15.2	19
1N969B ✓	22	5.6	29	750	0.25	0.087	5	16.7	17

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✓ Mil-Approved Devices, See Page 5 for Level of Qual

■ Under Development, Please Consult Factory

DO-35 Glass Package (nominal dimensions)



Type	Volts	mA	Ohms	Ohms	mA	%/°C	μA	Volts	mA
1N970B ✓	24	5.2	33	750	0.25	0.088	5	18.2	16
1N971B ✓	27	4.6	41	750	0.25	0.090	5	20.6	14
1N972B ✓	30	4.2	49	1000	0.25	0.091	5	22.8	13
1N973B ✓	33	3.8	58	1000	0.25	0.092	5	25.1	12
1N974B ✓	36	3.4	70	1000	0.25	0.093	5	27.4	11
1N975B ✓	39	3.2	80	1000	0.25	0.094	5	29.7	9.1
1N976B ✓	43	3.0	93	1500	0.25	0.095	5	32.7	8.8
1N977B ✓	47	2.7	105	1500	0.25	0.095	5	35.8	7.9
1N978B ✓	51	2.5	125	1500	0.25	0.096	5	38.8	7.4
1N979B ✓	56	2.2	150	2000	0.25	0.096	5	42.6	6.9
1N980B ✓	62	2.0	185	2000	0.25	0.097	5	47.1	6.0
1N981B ✓	68	1.8	230	2000	0.25	0.097	5	51.7	5.5
1N982B ✓	75	1.7	270	2000	0.25	0.098	5	56.0	5.1
1N983B ✓	82	1.5	330	3000	0.25	0.098	5	62.2	4.6
1N984B ✓	91	1.4	400	3000	0.25	0.099	5	69.2	4.2
1N985B ✓	100	1.3	500	3000	0.25	0.11	5	76.0	3.7
1N986B ✓	110	1.1	750	4000	0.25	0.11	5	83.6	3.3
1N987B ✓	120	1.0	900	4500	0.25	0.11	5	91.2	3.1
1N988B ✓	130	0.95	1100	5000	0.25	0.11	5	98.8	2.7
1N989B ✓	150	0.85	1500	6000	0.25	0.11	5	114.0	2.4
1N990B ✓	160	0.80	1700	6500	0.25	0.11	5	121.6	2.2
1N991B ✓	180	0.68	2200	7100	0.25	0.11	5	136.8	2.0
1N992B ✓	200	0.65	2500	8000	0.25	0.11	5	152.0	1.8

Voltage tolerance is ± 5 %. Use suffix "A" for ± 10% tolerance and non-suffix part numbers for ± 20% tolerance.

Other tolerances, non-standard and higher zener voltages upon request.

For MELF surface mount package, replace "1N" prefix with "LL".

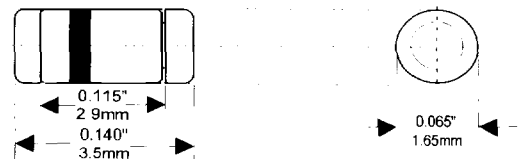
1N4600 & 1N4100 Series • 400 mWatt Low Noise Zener Diodes in DO-35 & LL-34/35 Packages

Type	Nominal Zener Voltage (V _Z) @ I _{Z1}	Test Current I _{Z1}	Maximum Zener Impedance (Z _{Z1})	Maximum Reverse Leakage Current		Maximum Noise Density (N _B) @ I _{Z1}	Maximum Zener Current (I _{ZM})	Typical Temperature Coefficient
	Volts	μA	Ohms	(I _R) μA	@ V _R Volts	μV/Hz	mA	% / °C
1N4624	4.7	250	1550	10.0	3	1	60	-0.040, +0.020
1N4625 ✓	5.1	250	1500	10.0	3	2	70	-0.045, +0.030
1N4626 ✓	5.6	250	1400	10.0	4	4	65	-0.020, +0.040
1N4627 ✓	6.2	250	1200	10.0	5	5	61	-0.010, +0.050
1N4099 ✓	6.8	250	200	10.0	5.17	40	56	0.040
1N4100 ✓	7.5	250	200	10.0	5.70	40	51	0.045
1N4101 ✓	8.2	250	200	1.0	6.24	40	46	0.048
1N4102 ✓	8.7	250	200	1.0	6.61	40	44	0.049
1N4103 ✓	9.1	250	200	1.0	6.92	40	42	0.050
1N4104 ✓	10	250	200	1.0	7.60	40	38	0.055
1N4105 ✓	11	250	200	0.05	8.44	40	35	0.060
1N4106 ✓	12	250	200	0.05	9.12	40	32	0.065
1N4107 ✓	13	250	200	0.05	9.87	40	29	0.065
1N4108 ✓	14	250	200	0.05	10.65	40	27	0.070
1N4109 ✓	15	250	100	0.05	11.40	40	25	0.070

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LL-34/35 MINI-MELF Surface Mount Package (nominal dimensions)



Type	Volts	μA	Ohms	μA	Volts	$\mu\text{V}/\text{Hz}$	mA	% / °C
1N4110 ✓	16	250	100	0.05	12.15	40	24	0.070
1N4111 ✓	17	250	100	0.05	12.92	40	22	0.075
1N4112 ✓	18	250	100	0.05	13.67	40	21	0.075
1N4113 ✓	19	250	150	0.05	14.44	40	20	0.075
1N4114 ✓	20	250	150	0.01	15.20	40	19	0.075
1N4115 ✓	22	250	150	0.01	16.72	40	17	0.080
1N4116 ✓	24	250	150	0.01	18.25	40	16	0.080
1N4117 ✓	25	250	150	0.01	19.00	40	15	0.080
1N4118 ✓	27	250	150	0.01	20.45	40	14	0.085
1N4119 ✓	28	250	200	0.01	21.28	40	14	0.085
1N4120 ✓	30	250	200	0.01	22.80	40	13	0.085
1N4121 ✓	33	250	200	0.01	25.08	40	12	0.085
1N4122	36	250	200	0.01	27.38	40	11	0.09
1N4123	39	250	200	0.01	29.65	40	9.8	0.09
1N4124	43	250	250	0.01	32.65	40	8.9	0.09
1N4125	47	250	250	0.01	35.75	40	8.1	0.09
1N4126	51	250	300	0.01	38.76	40	7.5	0.09
1N4127	56	250	300	0.01	42.60	40	6.7	0.09
1N4128	60	250	400	0.01	45.60	40	6.4	0.09
1N4129	62	250	500	0.01	47.10	40	6.1	0.09
1N4130	68	250	700	0.01	51.68	40	5.6	0.095
1N4131	75	250	700	0.01	57.00	40	5.1	0.095
1N4132	82	250	800	0.01	62.32	40	4.6	0.095
1N4133	87	250	1000	0.01	66.12	40	4.4	0.095
1N4134	91	250	1200	0.01	69.16	40	4.2	0.095
1N4135	100	250	1500	0.01	76.00	40	3.8	0.095

Voltage tolerance is $\pm 5\%$.

For MELF surface mount package, replace "1N" prefix with "LL".

1N5226 Series • 500 mWatt Glass Zener Diodes in DO-35 & LL-34/35 Packages

Type	Nominal Zener Voltage (V_Z) @ I_{ZT} Volts	Test Current I_{ZT} mA	Maximum Zener Impedance		Typical Temperature Coefficient %/°C	Maximum Reverse Leakage Current		Maximum Regulator Current (I_{ZM}) mA
			(Z_{Z1}) @ I_{ZT} Ohms	(Z_{ZK}) @ $I_{ZK} = 0.25\text{mA}$ Ohms		(I_R) μA	@ V_R Volts	
1N5226B	3.3	20	28	1600	-0.070	25	1.0	138
1N5227B	3.6	20	24	1700	-0.065	15	1.0	126
1N5228B	3.9	20	23	1900	-0.060	10	1.0	115
1N5229B	4.3	20	22	2000	-0.055	5	1.0	106
1N5230B	4.7	20	19	1900	+/-0.030	5	2.0	97
1N5231B	5.1	20	17	1600	+/-0.030	5	2.0	89
1N5232B	5.6	20	11	1600	0.038	5	3.0	81
1N5233B	6.0	20	7	1600	0.038	5	3.5	76
1N5234B	6.2	20	7	1000	0.045	5	4.0	73
1N5235B	6.8	20	5	750	0.050	3	5.0	67
1N5236B	7.5	20	6	500	0.058	3	6.0	61
1N5237B	8.2	20	8	500	0.062	3	6.5	55

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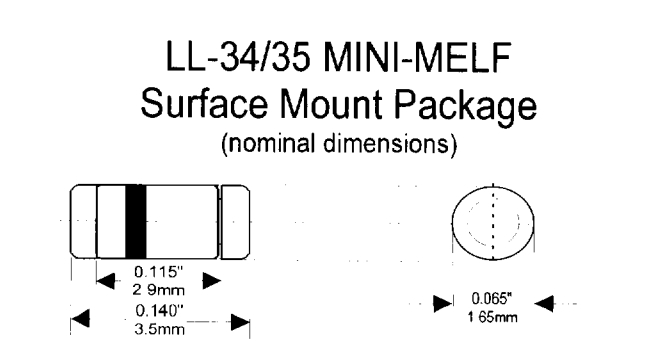
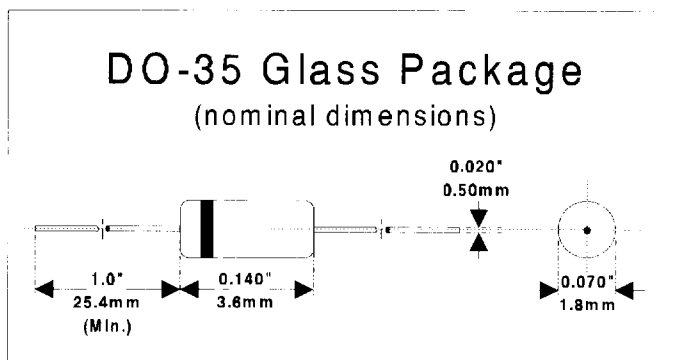
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Type	Volts	mA	Ohms	Ohms	%/°C	μA	Volts	mA
1N5238B	8.7	20	8	600	0.065	3	6.5	52
1N5239B	9.1	20	10	600	0.068	3	7.0	50
1N5240B	10	20	17	600	0.075	3	8.0	45
1N5241B	11	20	22	600	0.076	2	8.4	41
1N5242B	12	20	30	600	0.077	1	9.1	38
1N5243B	13	9.5	13	600	0.079	0.5	9.9	35
1N5244B	14	9.0	15	600	0.082	0.1	10	32
1N5245B	15	8.5	16	600	0.082	0.1	11	30
1N5246B	16	7.8	17	600	0.083	0.1	12	28
1N5247B	17	7.4	19	600	0.084	0.1	13	27
1N5248B	18	7.0	21	600	0.085	0.1	14	25
1N5249B	19	6.6	23	600	0.086	0.1	14	24
1N5250B	20	6.2	25	600	0.086	0.1	15	23
1N5251B	22	5.6	29	600	0.087	0.1	17	21
1N5252B	24	5.2	33	600	0.087	0.1	18	19.1
1N5253B	25	5.0	35	600	0.089	0.1	19	18.2
1N5254B	27	4.6	41	600	0.090	0.1	21	16.8
1N5255B	28	4.5	44	600	0.091	0.1	21	16.2
1N5256B	30	4.2	49	600	0.091	0.1	23	15.1
1N5257B	33	3.8	58	700	0.092	0.1	25	13.8
1N5258B	36	3.4	70	700	0.093	0.1	27	13
1N5259B	39	3.2	80	800	0.094	0.1	30	12
1N5260B	43	3.0	93	900	0.095	0.1	33	10.5
1N5261B	47	2.7	105	1000	0.095	0.1	36	10
1N5262B	51	2.5	125	1100	0.096	0.1	39	9
1N5263B	56	2.2	150	1300	0.096	0.1	43	8
1N5264B	60	2.1	170	1400	0.097	0.1	46	7.5
1N5265B	62	2.0	185	1400	0.097	0.1	47	7
1N5266B	68	1.8	230	1600	0.097	0.1	52	6.6
1N5267B	75	1.7	270	1700	0.098	0.1	56	6
1N5268B	82	1.5	330	2000	0.098	0.1	62	5.5
1N5269B	87	1.4	370	2200	0.099	0.1	68	5.2
1N5270B	91	1.4	400	2300	0.099	0.1	69	5
1N5271B	100	1.3	500	2600	0.110	0.1	76	4.5
1N5272B	110	1.1	750	3000	0.110	0.1	84	4.1
1N5273B	120	1.0	900	4000	0.110	0.1	91	3.8
1N5274B	130	0.95	1100	4500	0.110	0.1	99	3.5
1N5275B	140	0.90	1300	4500	0.110	0.1	106	3.2
1N5276B	150	0.85	1500	5000	0.110	0.1	114	3
1N5277B	160	0.80	1700	5500	0.110	0.1	122	2.8
1N5278B	170	0.74	1900	5500	0.110	0.1	129	2.6
1N5279B	180	0.68	2200	6000	0.110	0.1	137	2.5
1N5280B	190	0.66	2400	6500	0.110	0.1	144	2.4
1N5281B	200	0.65	2500	2500	0.110	0.1	152	2.3

Voltage tolerance is ± 5%. Use suffix "A" for ± 10% tolerance, and non-suffix part numbers for ± 20% tolerance.

Other tolerances, non-standard and higher zener voltages upon request.

For MELF surface mount package, replace "1N" prefix with "LL".



1N5523 Series • Low Noise, Low Leakage Zener Diodes in DO-35 & LL-34/35 Packages

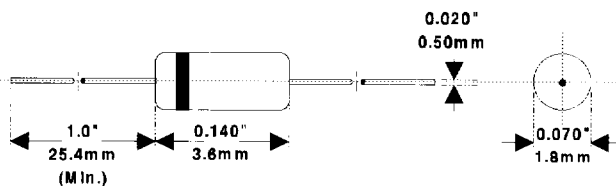
Type	Nominal Zener Voltage (V _Z) @ I _{Z1}	Test Current I _{Z1}	Max. Zener Impedance B, C, D Suffix (Z _{Z1}) @ I _{Z1}	Maximum Reverse Leakage Current			B, C, D Suffix Maximum DC Zener Current (I _{ZM})	B, C, D Suffix Max. Noise Density @ I _Z = 250 μA (ND) (Micro Volts Per Square Root Cycle)	Regulation Factor V _Z , V _{ZL} (ΔV _Z)	Low ΔV _Z Test Current I _{ZL}
				(I _R)	A Suffix @ V _R	B, C, D Suffix @ V _R				
	Volts	mA	Ohms	μA	Volts	Volts	mA		Volts	mA
1N5523B	5.1	5.0	26	2.0	2.0	2.5	75	0.5	0.65	0.25
1N5524B	5.6	3.0	30	2.0	3.0	3.5	68	1.0	0.30	0.25
1N5525B	6.2	1.0	30	1.0	4.5	5.0	61	1.0	0.20	0.01
1N5526B	6.8	1.0	30	1.0	5.5	6.2	56	1.0	0.10	0.01
1N5527B	7.5	1.0	35	0.5	6.0	6.8	51	2.0	0.05	0.01
1N5528B	8.2	1.0	40	0.5	6.5	7.5	46	4.0	0.05	0.01
1N5529B	9.1	1.0	45	0.1	7.0	8.2	42	4.0	0.05	0.01
1N5530B ✓	10.0	1.0	60	0.05	8.0	9.1	38	4.0	0.10	0.01
1N5531B ✓	11.0	1.0	80	0.05	9.0	9.9	35	5.0	0.20	0.01
1N5532B ✓	12.0	1.0	90	0.05	9.5	10.8	32	10	0.20	0.01
1N5533B ✓	13.0	1.0	90	0.01	10.5	11.7	29	15	0.20	0.01
1N5534B ✓	14.0	1.0	100	0.01	11.5	12.6	27	20	0.20	0.01
1N5535B ✓	15.0	1.0	100	0.01	12.5	13.5	25	20	0.20	0.01
1N5536B ✓	16.0	1.0	100	0.01	13.0	14.4	24	20	0.20	0.01
1N5537B ✓	17.0	1.0	100	0.01	14.0	15.3	22	20	0.20	0.01
1N5538B ✓	18.0	1.0	100	0.01	15.0	16.2	21	20	0.20	0.01
1N5539B ✓	19.0	1.0	100	0.01	16.0	17.1	20	20	0.20	0.01
1N5540B ✓	20.0	1.0	100	0.01	17.0	18.0	19	20	0.20	0.01
1N5541B ✓	22.0	1.0	100	0.01	18.0	19.8	17	20	0.25	0.01
1N5542B ✓	24.0	1.0	100	0.01	20.0	21.6	16	20	0.30	0.01
1N5543B ✓	25.0	1.0	100	0.01	21.0	22.4	15	20	0.35	0.01
1N5544B ✓	28.0	1.0	100	0.01	23.0	25.2	14	20	0.40	0.01
1N5545B ✓	30.0	1.0	100	0.01	24.0	27.0	13	20	0.45	0.01
1N5546B ✓	33.0	1.0	100	0.01	28.0	29.7	12	20	0.50	0.01

Voltage tolerance is ± 5%; use suffix A for ± 10 %; suffix C for ± 2%; suffix D for ± 1%
 For MELF surface mount package, replace "1N" prefix with "LL".

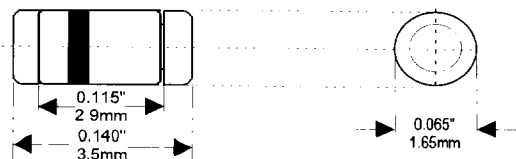
✓ Mil-Approved Devices, See Page 5 for Level of Qual

Zener diodes are available in multiple tolerance selections. Please consult factory.

DO-35 Glass Package (nominal dimensions)



LL-34/35 MINI-MELF Surface Mount Package (nominal dimensions)



1N6316 Series • 500 mWatt Voidless Hard Glass Zener Diodes in DO-35 Package



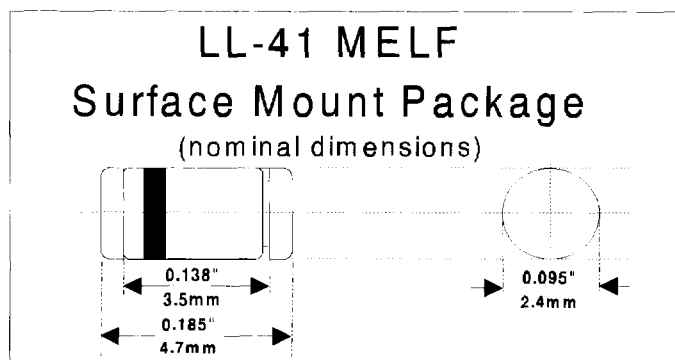
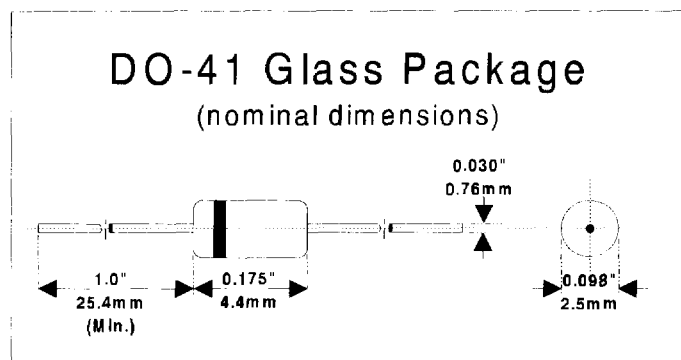
Type	Nominal Zener Voltage	Minimal Zener Voltage	Test Current	Maximum Zener Impedance		Maximum Regulator Current	Reg. Factor	Maximum Surge Current	Maximum Reverse Leakage Current			Noise Density @ 250µA 1.3KHz	Typical Temp. Coeff.	Typical Capac. @ 0V
	@ I _{Z2} +/- 5% (V _{Z2})	@ I _{Z1} 250µA (V _{Z1})		(Z _Z) @ I _{Z2}	(Z _{ZK}) @ 250µA				(I _R) @ V _R	25°C	150°C			
	Volts	Volts	mA	Ohms	Ohms	mA	Volts	Amps	µA	µA	V	uV	%/°C	pF
1N6316 ■	4.7	2.8	20	16	1500	90	0.5	1.27	5.0	12	1.5	1.0	-0.028 +0.032	1300
1N6317 ■	5.1	3.3	20	14	1300	83	0.4	1.17	5.0	12	2.0	1.0	0.045	1200
1N6318 ■	5.6	4.3	20	8.0	1200	76	0.4	1.10	5.0	10	2.5	2.0	0.050	1150
1N6319 ■	6.2	5.2	20	3.0	800	68	0.3	0.97	5.0	10	3.5	5.0	0.060	1050
1N6320 ■	6.8	6.0	20	3.0	400	63	0.35	1.23	2.0	10	4.0	5.0	0.062	1000
1N6321 ✓	7.5	6.6	20	4.0	400	57	0.4	1.16	2.0	10	5.0	5.0	0.068	900
1N6322 ✓	8.2	7.5	20	5.0	400	52	0.4	1.07	1.0	10	6.0	20	0.075	800
1N6323 ✓	9.1	8.4	20	6.0	500	47	0.5	0.97	1.0	10	7.0	40	0.076	700
1N6324 ✓	10	9.1	20	6.0	500	43	0.5	0.89	1.0	10	8.0	80	0.079	600
1N6325 ✓	11	10	20	7.0	550	39	0.5	0.83	1.0	10	8.5	100	0.082	500.
1N6326 ✓	12	11	20	7.0	550	35	0.55	0.77	1.0	10	9.0	100	0.083	450
1N6327 ✓	13	11.9	9.5	8.0	550	33	0.55	0.71	0.05	10	9.9	100	0.079	400
1N6328 ✓	15	13.8	8.5	10	600	28	0.70	0.62	0.05	10	11	100	0.082	350
1N6329 ✓	16	14.7	7.8	12	600	27	0.75	0.58	0.05	10	12	100	0.083	325
1N6330 ✓	18	16.6	7.0	14	600	24	0.85	0.52	0.05	10	14	100	0.085	300
1N6331 ✓	20	18.5	6.2	18	500	21	0.95	0.47	0.05	10	15	100	0.086	275
1N6332 ✓	22	20.4	5.6	20	500	19	1.05	0.43	0.05	10	17	100	0.087	260
1N6333 ✓	24	22.3	5.2	24	500	18	1.15	0.39	0.05	10	18	100	0.088	240
1N6334 ✓	27	25.2	4.6	27	500	16	1.30	0.35	0.05	10	21	100	0.090	220
1N6335 ✓	30	28	4.2	32	500	14	1.45	0.31	0.05	10	23	100	0.091	200
1N6336 ✓	33	30.9	3.8	40	600	13	1.60	0.28	0.05	10	25	100	0.092	185
1N6337 ✓	36	33.7	3.4	50	600	12	1.75	0.26	0.05	10	27	100	0.093	175
1N6338 ✓	39	36.6	3.2	55	700	11	1.90	0.24	0.05	10	30	100	0.094	170
1N6339 ✓	43	40.4	3.0	65	800	9.9	2.10	0.22	0.05	10	33	80	0.095	165
1N6340 ✓	47	44.2	2.7	75	900	9.0	2.25	0.20	0.05	10	36	80	0.095	155
1N6341 ✓	51	48	2.5	85	1000	8.3	2.50	0.18	0.05	10	39	80	0.096	145
1N6342 ✓	56	52.7	2.2	100	1200	7.6	2.70	0.17	0.05	10	43	80	0.097	135
1N6343 ✓	62	58.4	2.0	125	1300	6.8	2.90	0.15	0.05	10	47	80	0.097	130
1N6344 ✓	68	64.1	1.8	155	1500	6.3	3.20	0.13	0.05	10	52	80	0.098	120
1N6345 ✓	75	70.8	1.7	180	1600	5.7	3.40	0.125	0.05	10	56	80	0.098	110
1N6346 ✓	82	77.4	1.5	220	1800	5.2	3.80	0.115	0.05	10	62	80	0.099	105
1N6347 ✓	91	86	1.4	270	2100	4.7	4.20	0.100	0.05	10	69	80	0.099	100
1N6348 ✓	100	94.5	1.3	340	2400	4.3	4.40	0.095	0.05	10	76	80	0.110	95
1N6349 ✓	110	104	1.1	500	2800	3.9	4.80	0.085	0.05	10	84	80	0.110	90
1N6350 ✓	120	113	1.0	600	3200	3.5	5.20	0.080	0.05	10	91	80	0.110	70
1N6351 ✓	130	122	0.95	850	4100	3.3	5.60	0.070	0.05	10	99	80	0.110	70
1N6352 ✓	150	141	0.85	1000	4500	2.8	7.00	0.065	0.05	10	114	80	0.110	65
1N6353 ✓	160	151	0.80	1200	5000	2.7	7.50	0.060	0.05	10	122	80	0.110	65
1N6354 ✓	180	170	0.68	1500	5600	2.4	9.00	0.050	0.05	10	137	80	0.110	60
1N6355 ✓	200	189	0.65	1800	6500	2.1	12.0	0.045	0.05	10	152	80	0.110	55

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1N4729 Series • 1 Watt Glass Zener Diodes in DO-41 & LL-41 Surface Mount Packages

Type	Nominal Zener Voltage (V _Z) @ I _{ZT} Volts	Test Current I _{ZT} mA	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum Surge Current 8.5 ms (I _{ZSM}) mA	Maximum Regulator Current (I _{ZM}) mA
			(Z _{ZT}) @ I _{ZT} Ohms	(Z _{ZK}) @ I _{ZK} Ohms	I _{ZK} mA	(I _R) μA	@ V _R Volts		
1N4729A	3.6	69	10	400	1.0	100	1	1260	252
1N4730A	3.9	64	9	400	1.0	100	1	1190	234
1N4731A	4.3	58	9	400	1.0	50	1	1070	217
1N4732A	4.7	53	8	500	1.0	10	1	970	193
1N4733A	5.1	49	7	550	1.0	10	1	890	178
1N4734A	5.6	45	5	600	1.0	10	2	810	162
1N4735A	6.2	41	2	700	1.0	10	3	730	146
1N4736A	6.8	37	3.5	700	1.0	10	4	660	133
1N4737A	7.5	34	4	700	0.5	10	5	605	121
1N4738A	8.2	31	4.5	700	0.5	10	6	550	110
1N4739A	9.1	28	5	700	0.5	10	7	500	100
1N4740A	10	25	7	700	0.25	10	7.6	454	91
1N4741A	11	23	8	700	0.25	5	8.4	414	83
1N4742A	12	21	9	700	0.25	5	9.1	380	76
1N4743A	13	19	10	700	0.25	5	9.9	344	69
1N4744A	15	17	14	700	0.25	5	11.4	304	61
1N4745A	16	15.5	16	700	0.25	5	12.2	285	57
1N4746A	18	14	20	750	0.25	5	13.7	250	50
1N4747A	20	12.5	22	750	0.25	5	15.2	225	45
1N4748A	22	11.5	23	750	0.25	5	16.7	205	41
1N4749A	24	10.5	25	750	0.25	5	18.2	190	38
1N4750A	27	9.5	35	750	0.25	5	20.6	170	34
1N4751A	30	8.5	40	1000	0.25	5	22.8	150	30
1N4752A	33	7.5	45	1000	0.25	5	25.1	135	27
1N4753A	36	7.0	50	1000	0.25	5	27.4	125	25
1N4754A	39	6.5	60	1000	0.25	5	29.7	115	23
1N4755A	43	6.0	70	1500	0.25	5	32.7	110	21
1N4756A	47	5.5	80	1500	0.25	5	35.8	95	20
1N4757A	51	5.0	95	1500	0.25	5	38.8	90	18
1N4758A	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759A	62	4.0	125	2000	0.25	5	47.1	70	15
1N4760A	68	3.7	150	2000	0.25	5	51.7	65	13.5
1N4761A	75	3.3	175	2000	0.25	5	56.0	60	12
1N4762A	82	3.0	200	3000	0.25	5	62.2	55	11
1N4763A	91	2.8	250	3000	0.25	5	69.2	50	10
1N4764A	100	2.5	350	3000	0.25	5	76	45	9.0

Voltage tolerance is ± 5%. Use non-suffix part numbers for ± 10% tolerance. Other tolerances and higher zener voltages available upon request. For MELF surface mount package, replace "1N" prefix with "LL".

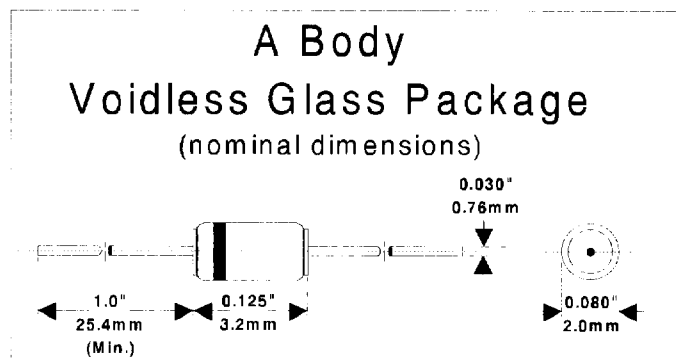


1N4661 & 1N4463 Series • 1.5 Watt Glass Zener Diodes in "A" Body Package

Type	Nominal Zener Voltage (V_Z) @ I_{Z1} Volts	Test Current I_{Z1} mA	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum Surge Current (I_{ZSM}) Amps	Maximum Regulator Current (I_{ZM}) mA
			(Z_{Z1}) @ I_{Z1} Ohms	(Z_{ZK}) @ I_{ZK} Ohms	I_{ZK} mA	(I_R) μ A	@ V_R Volts		
1N4661 ■	6.8	37	2.5	200	1.0	5	4.08	5	200
1N4662 ■	7.5	34	2.5	400	.5	1	4.50	4.5	180
1N4463 ■	8.2	31	3	400	.5	.5	4.92	3.9	165
1N4464	9.1	28	4	500	.5	.3	5.46	3.4	150
1N4465	10	25	5	500	.25	.3	8.00	3.0	135
1N4466	11	23	6	550	.25	.3	8.80	2.6	123
1N4467	12	21	7	550	.25	.2	9.60	2.4	113
1N4468	13	19	8	550	.25	.05	10.4	2.2	104
1N4469	15	17	9	600	.25	.05	12.0	1.8	90
1N4470	16	15.5	10	600	.25	.05	12.8	1.6	85
1N4471	18	14	11	650	.25	.05	14.4	1.4	75
1N4472	20	12.5	12	650	.25	.05	16.0	1.2	68
1N4473	22	11.5	14	650	.25	.05	17.6	1.1	62
1N4474	24	10.5	16	700	.25	.05	19.2	.90	57
1N4475	27	9.5	18	700	.25	.05	21.6	.80	50
1N4476	30	8.5	20	750	.25	.05	24.0	.75	45
1N4477	33	7.5	25	800	.25	.05	26.4	.66	41
1N4478	36	7.0	27	850	.25	.05	28.8	.60	38
1N4479	39	6.5	30	900	.25	.05	31.2	.54	35
1N4480	43	6.0	40	950	.25	.05	34.4	.48	32
1N4481	47	5.5	50	1000	.25	.05	37.6	.45	29
1N4482	51	5.0	60	1100	.25	.05	40.8	.42	27
1N4483	56	4.5	70	1300	.25	.25	44.8	.39	25
1N4484	62	4.0	80	1500	.25	.25	49.6	.35	22
1N4485	68	3.7	100	1700	.25	.25	54.4	.32	20
1N4486	75	3.3	130	2000	.25	.25	60.4	.29	18
1N4487	82	3.0	160	2500	.25	.25	65.6	.26	17
1N4488	91	2.8	200	3000	.25	.25	72.8	.23	16
1N4489	100	2.5	250	3100	.25	.25	80.0	.20	14
1N4490	110	2.0	300	4000	.25	.25	88.0	.19	13
1N4491	120	2.0	400	4500	.25	.25	96.0	.18	12
1N4492	130	1.9	500	5000	.25	.25	104.0	.16	11
1N4493	150	1.7	700	6000	.25	.25	120.0	.14	9.5
1N4494	160	1.6	1000	6500	.25	.25	128.0	.12	8.9
1N4495	180	1.4	1300	7000	.25	.25	144.0	.10	7.9
1N4496	200	1.2	1500	8000	.25	.25	160.0	.08	7.2

Nominal zener voltage is $\pm 5\%$ tolerance.

■ Under Development, Please Consult Factory



1N5969, 1N4954 Series • 5 Watt Glass Zener Diodes in "B" Body Package



Type	Nominal Zener Voltage (V _Z) @ I _{Z1} Volts	Test Current I _{Z1} mA	Maximum Zener Impedance		Regulation Factor (V _Z) Volts	Maximum Reverse Leakage Current		Typical Temperature Coeff. (T _C) @ I _{Z1} %/°C	Maximum Continuous Current (I _{ZM}) mA	Maximum Surge Current (I _{ZSM}) Amps
			(Z _Z) @ I _{Z1} Ohms	(Z _{ZK}) @ I _{ZK} = 1 mA Ohms		(I _R) μA	@ V _R Volts			
1N5969 ✓	6.2	220	1.0	1000	0.5	1000	4.74	0.04	765	20
1N4954 ✓	6.8	175	1.0	1000	0.7	150	5.2	0.05	700	40
1N4955 ✓	7.5	175	1.5	800	0.7	100	5.7	0.06	630	32
1N4956 ✓	8.2	150	1.5	600	0.7	50	6.2	0.06	580	24
1N4957 ✓	9.1	150	2.0	400	0.7	25	6.9	0.06	520	22
1N4958 ✓	10.0	125	2.0	125	0.8	25	7.6	0.07	475	20
1N4959 ✓	11	125	2.5	130	0.8	10	8.4	0.07	430	19
1N4960 ✓	12	100	2.5	140	0.8	10	9.1	0.07	395	18
1N4961 ✓	13	100	3.0	145	0.8	10	9.9	0.08	365	16
1N4962 ✓	15	75	3.5	150	1.0	5	11.4	0.08	315	12
1N4963 ✓	16	75	3.5	155	1.1	5	12.2	0.08	294	10
1N4964 ✓	18	65	4.0	160	1.2	5	13.7	0.085	264	9.0
1N4965 ✓	20	65	4.5	165	1.5	2	15.2	0.085	237	8.0
1N4966 ✓	22	50	5.0	170	1.8	2	16.7	0.085	216	7.0
1N4967 ✓	24	50	5.0	175	2.0	2	18.2	0.090	198	6.5
1N4968 ✓	27	50	6.0	180	2.0	2	20.6	0.090	176	6.0
1N4969 ✓	30	40	8	190	2.5	2	22.8	0.090	158	5.5
1N4970 ✓	33	40	10	200	2.8	2	25.1	0.095	144	5.0
1N4971 ✓	36	30	11	220	3.0	2	27.4	0.095	132	4.5
1N4972 ✓	39	30	14	230	3.0	2	29.7	0.095	122	4.0
1N4973 ✓	43	30	20	240	3.3	2	32.7	0.095	110	3.5
1N4974 ✓	47	25	25	250	3.5	2	35.8	0.095	100	3.2
1N4975 ✓	51	25	27	270	4.0	2	38.8	0.095	92	3.0
1N4976 ✓	56	20	35	320	4.4	2	42.6	0.095	84	2.8
1N4977 ✓	62	20	42	400	5.0	2	47.1	0.100	76	2.5
1N4978 ✓	68	20	50	500	5.5	2	51.7	0.100	70	2.2
1N4979 ✓	75	20	55	620	6.0	2	56.0	0.100	63.0	2.0
1N4980 ✓	82	15	80	720	6.6	2	62.2	0.100	58.0	1.8
1N4981 ✓	91	15	90	760	7.5	2	69.2	0.100	52.5	1.6
1N4982 ✓	100	12	110	800	8.0	2	76.0	0.100	47.5	1.4
1N4983 ✓	110	12	125	1000	9.0	2	83.6	0.100	43.0	1.2

Nominal zener voltage is ± 5% tolerance.

✓ Mil-Approved Devices, See Page 5 for Level of Qual

