1N957 thru 1N984

Zener Diodes

Nominal Zener Voltage 6.8 to 91 Volts Power Dissipation 500mW

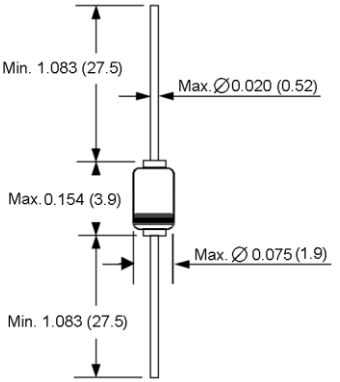
Features

- Silicon Planar Power Zener Diodes.
- Standard Zener voltage tolerance is ±5% for “A” suffix, and ±10% for “B” suffix . Other tolerances are available upon request.

DO-204AH (DO-35 Glass)

Mechanical Data

- Case: DO-35 Glass Case
- Weight: approx. 0.13 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics

(T_A=25ºC unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener current (see Table "Characteristics")			
Power dissipation at T_L=25ºC	P_{tot}	500 (1)	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	300 (1)	ºC/W
Junction temperature	T_j	175	ºC
Storage temperature range	T_S	-65 to +175	ºC

Notes: 1. Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

Electrical Characteristics

(T_J=25°C unless otherwise noted) **Maximum V_F=0.9V at I_F=10mA**

Type number	Nominal zener voltage V_Z [3] (Volts)	Test current I_{ZT} (mA)	Maximum zener impedance [1]			Maximum regulator current I_{ZM} [2] (mA)	Maximum reverse current	
			Z_{ZT} @ I_{ZT} (Ω)	Z_{ZK} @ I_{ZK} (Ω)	I_{ZK} (mA)		I_R Maximum (μA)	Test voltage V_{dc} (Volts)
1N957B	6.8	18.5	4.5	700	1	58	150	5.2
1N958B	7.5	16.5	5.5	700	0.5	53	75	5.7
1N959B	8.2	15	6.5	700	0.5	47	50	6.2
1N960B	9.1	14	7.5	700	0.5	43	25	6.9
1N961B	10	12.5	8.5	700	0.25	40	10	7.6
1N962B	11	11.5	9.5	700	0.25	36	5	8.4
1N963B	12	10.5	11.5	700	0.25	32	5	9.1
1N964B	13	9.5	13	700	0.25	29	5	9.9
1N965B	15	8.5	16	700	0.25	27	5	11.4
1N966B	16	7.8	17	700	0.25	24	5	12.2
1N967B	18	7	21	750	0.25	21	5	13.7
1N968B	20	6.2	25	750	0.25	20	5	15.2
1N969B	22	5.6	29	750	0.25	18	5	16.7
1N970B	24	5.2	33	750	0.25	16	5	18.2
1N971B	27	4.6	41	750	0.25	14	5	20.6
1N972B	30	4.2	49	1000	0.25	13	5	22.8
1N973B	33	3.8	58	1000	0.25	12	5	25.1
1N974B	36	3.4	70	1000	0.25	11	5	27.4
1N975B	39	3.2	80	1000	0.25	10	5	29.7
1N976B	43	3	93	1500	0.25	9.2	5	32.7
1N977B	47	2.7	105	1500	0.25	8.5	5	35.8
1N978B	51	2.5	125	1500	0.25	7.8	5	38.8
1N979B	56	2.2	150	2000	0.25	6.9	5	42.6
1N980B	62	2.0	185	2000	0.25	6.3	5	47.1
1N981B	68	1.8	230	2000	0.25	5.7	5	51.7
1N982B	75	1.7	270	2000	0.25	5.2	5	56.0
1N983B	82	1.5	330	3000	0.25	4.7	5	62.2
1N984B	91	1.4	440	3000	0.25	4.3	5	69.2

Notes: 1. The Zener Impedance is derived from the 1 KHZ AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT}) is superimposed on I_{ZT}. Zener Impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

2. Valid provided that leads at a distance of 3/8" from case are kept at 25°C ambient temperature.

3. Measured with device junction in thermal equilibrium.