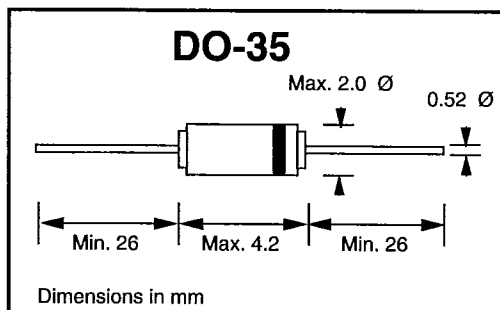




**International
Semiconductor, Inc.**

1N746 thru 1N759, 1N957A thru 1N986A, 1N4370 thru 1N4372 Glass Zener Diodes

Voltage: 2.4 to 56 Volts, 500 Milliwatts



FEATURES

- Electrical Characteristics ($T_A = 25^\circ\text{C}$)
- Silicon Planar diode with double heat sink and glass sealed
- Storage Temperature: -65°C to 175°C
- Junction Temperature: 175°C
- Power Dissipation: 400MW (to 25°C)

Type Number	Nominal Zener Voltage $V_Z @ I_{ZT}$	Test Current I_{ZT} mA	Maximum Zener Impedance $Z_{ZT} @ I_{ZT}$ Ohms	Maximum Reverse Leakage Current			
				Maximum DC Zener Current I_{ZM} mA		$T_A = 25^\circ\text{C}$ $I_R @ V_R = 1V$ μA	$T_A = 150^\circ\text{C}$ $I_R @ V_R = 1V$ μA
1N4370	2.4	20	30	150	190	100	200
1N4371	2.7	20	30	135	165	75	150
1N4372	3.0	20	29	120	150	50	100
1N746*	3.3	20	28	110	135	10	30
1N747*	3.6	20	24	100	125	10	30
1N748*	3.9	20	23	95	115	10	30
1N749*	4.3	20	22	85	105	2	30
1N750*	4.7	20	19	75	95	2	30
1N751*	5.1	20	17	70	85	1	20
1N752*	5.6	20	11	65	80	1	20
1N753*	6.2	20	7	60	70	0.1	20
1N754*	6.8	20	5	55	65	0.1	20
1N755*	7.5	20	6	50	60	0.1	20
1N756*	8.2	20	8	45	55	0.1	20
1N757*	9.1	20	10	40	50	0.1	20
1N758*	10	20	17	35	45	0.1	20
1N759*	12	20	30	30	35	0.1	20

* Available in JAN, JAN-TX, and JAN-TXV

Type Number	Nominal Zener Voltage V_Z Volts	Test Current I_{ZT} mA	Maximum Zener Impedance			Maximum DC Zener Current I_{ZT} mA		Maximum Reverse Current		
			$Z_{ZT} @ I_{ZT}$ Ohms	$Z_{ZK} @ I_{ZK}$ Ohms	I_{ZK} mA			I_R Maximum μA	Test Voltage Vdc 5% V_R 10%	
1N957A	6.8	18.5	4.5	700	1.0	47	61	150	5.2	4.9
1N958A	7.5	16.5	5.5	700	0.5	42	55	75	5.7	5.4
1N959A	8.2	15	6.5	700	0.5	38	50	50	6.2	5.9
1N960A	9.1	14	7.5	700	0.5	35	45	25	6.9	6.6
1N961A	10	12.5	8.5	700	0.25	32	41	10	7.6	7.2
1N962A	11	11.5	9.5	700	0.25	28	37	5	8.4	8.0
1N963A	12	10.5	11.5	700	0.25	26	34	5	9.1	8.6
1N964A	13	9.5	13	700	0.25	24	32	5	9.9	9.4
1N965A	15	8.5	16	700	0.25	21	27	5	11.4	10.8
1N966A	16	7.8	17	700	0.25	19	37	5	12.2	11.5
1N967A	18	7.0	21	750	0.25	17	23	5	13.7	13.0
1N968A	20	6.2	25	750	0.25	15	20	5	15.2	14.4
1N969A	22	5.6	29	750	0.25	14	18	5	16.7	15.8
1N970A	24	5.2	33	750	0.25	13	17	5	18.2	17.3
1N971A	27	4.6	41	750	0.25	11	15	5	20.6	19.4
1N972A	30	4.2	49	1000	0.25	10	13	5	22.8	21.6
1N973A	33	3.8	58	1000	0.25	9.2	12	5	25.1	23.8
1N974A	36	3.4	70	1000	0.25	8.5	11	5	27.4	25.9
1N975A	39	3.2	80	1000	0.25	7.8	10	5	29.7	28.1
1N976A	43	3.0	93	1500	0.25	7.0	9.6	5	32.7	31.0
1N977A	47	2.7	105	1500	0.25	6.4	8.8	5	35.8	33.8
1N978A	51	2.5	125	1500	0.25	5.9	8.1	5	38.8	36.7
1N979A	56	2.2	150	2000	0.25	5.4	7.4	5	42.6	40.3

The type numbers shown have tolerance designations as follows:

1N4370 series: $\pm 10\%$, suffix A for $\pm 5\%$ units

1N746 series: $\pm 10\%$, suffix A for $\pm 5\%$ units

1N957 series: $\pm 10\%$, suffix A for $\pm 10\%$ units, suffix B for $\pm 5\%$

$\pm 2\%$ and $\pm 1\%$ available on special orders.

Corporate Offices:

727 Raritan Road, Suite 203
Clark, NJ 07066

Phone (908) 396-0322 FAX (908) 396-0410

Sales Office:

574 E. Alamo, #40
Chandler, AZ 85225

Phone (602) 497-8172 FAX (602) 497-8173



**International
Semiconductor, Inc.**

T-11-09

1N746 thru 1N759, 1N957A thru 1N986A, 1N4370 thru 1N4372 Glass Zener Diodes

Maximum Ratings and Characteristics

Figure 1: Steady State Power Derating

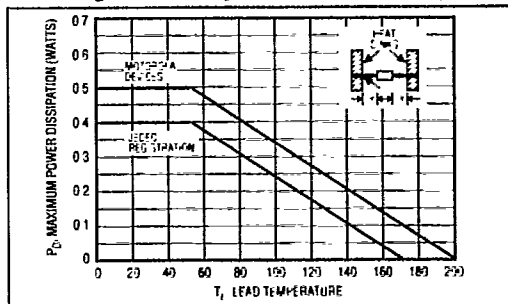


Figure 2: Typical Thermal Resistance

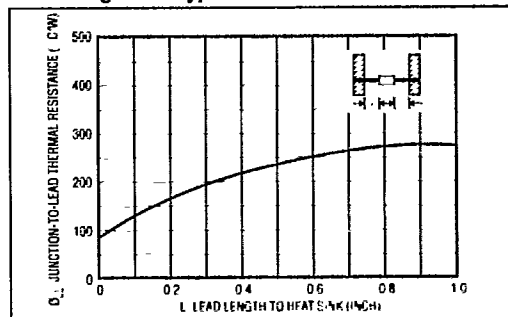


Figure 3: Typical Leakage Current

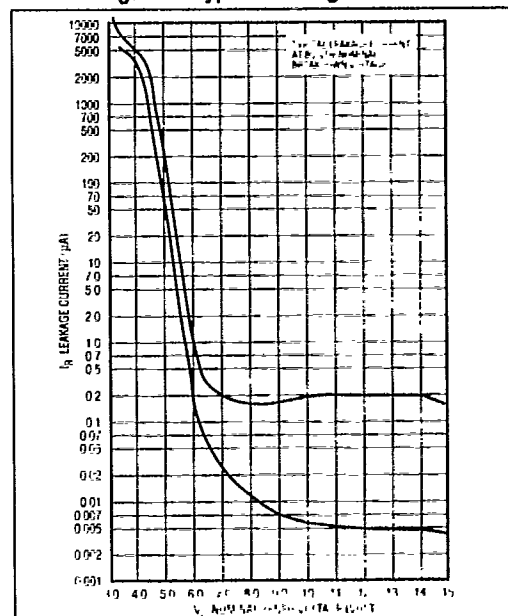


Figure 4: Zener Voltage vs. Zener Current - $V_Z = 1$ thru 6 Volts

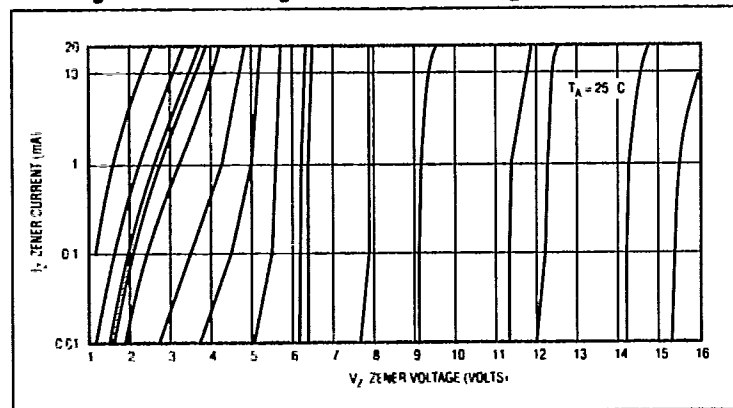


Figure 5: Zener Voltage vs. Zener Current - $V_Z = 15$ thru 30 Volts

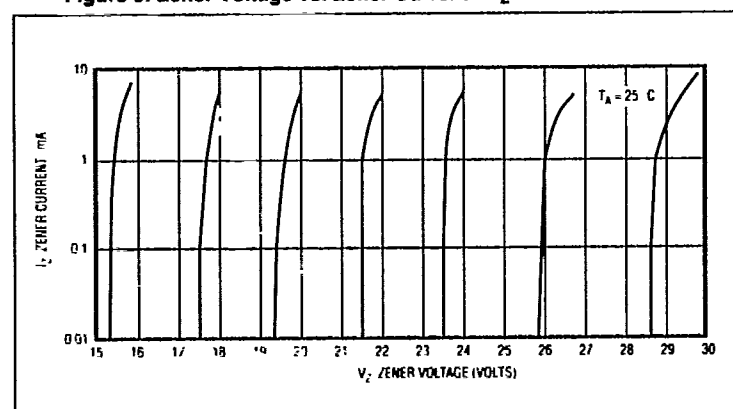
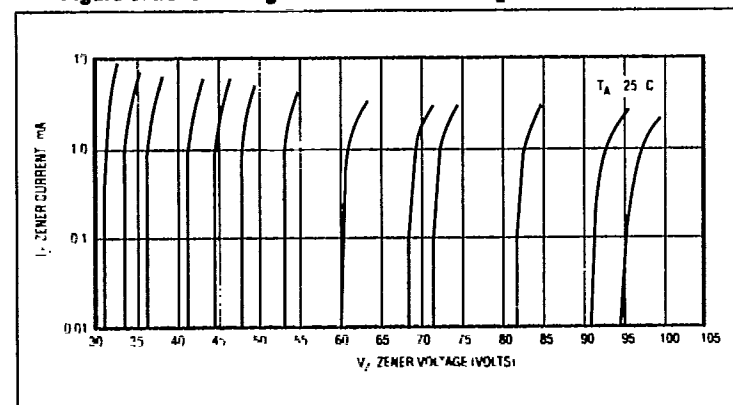


Figure 6: Zener Voltage vs. Zener Current - $V_Z = 30$ thru 105 Volts



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Sales Office:

574 E. Alamo, #40
Chandler, AZ 85225

Phone (602) 497-8172 FAX (602) 497-8173