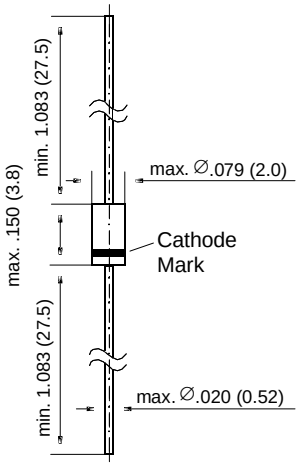
1N746 THRU 1N759

ZENER DIODES

DO-35



Dimensions are in inches and (millimeters)

FEATURES

- Silicon Planar Power Zener Diodes
- Standard Zener voltage tolerance is ±5% for "A" suffix. Other tolerances are available upon request.

MECHANICAL DATA

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

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	*VALUE*	*UNIT*
Zener Current (see Table "Characteristics")			
Power Dissipation at T_L = 75°C	P_{tot}	500(1)	mW
Maximum Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	– 65 to +175	°C

NOTES:
(1) T_L is measured 3/8" from body.

	SYMBOL	*MIN.*	*TYP.*	*MAX.*	*UNIT*
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	300(1)	°C/W
Forward Voltage at I_F = 200 mA	V_F	–	–	1.5	Volts

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

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ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Type Number	Nominal Zener Voltage V_Z @ I_{ZT}[3] (Volts)	Test Current I_{ZT} (mA)	Maximum Zener Impedance Z_{ZT} @ I_{ZT}[1] (Ω)	Maximum Regulator Current I_{ZM}[2] (mA)	Maximum Reverse Leakage Current	
					T_A = 25°C I_R @ V_R = 1V (μA)	T_A = 150°C I_R @ V_R = 1V (μA)
1N746A	3.3	20	28	110	10	30
1N747A	3.6	20	24	100	10	30
1N748A	3.9	20	23	95	10	30
1N749A	4.3	20	22	85	2	30
1N750A	4.7	20	19	75	2	30
1N751A	5.1	20	17	70	1	20
1N752A	5.6	20	11	65	1	20
1N753A	6.2	20	7	60	0.1	20
1N754A	6.8	20	5	55	0.1	20
1N755A	7.5	20	6	50	0.1	20
1N756A	8.2	20	8	45	0.1	20
1N757A	9.1	20	10	40	0.1	20
1N758A	10	20	17	35	0.1	20
1N759A	12	20	30	30	0.1	20

NOTES:

(1) The Zener Impedance is derived from the 1 KH_Z 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 ambient temperature.

(3) Measured with device junction in thermal equilibrium.