1N746 THRU 1N759

ZENER DIODES

DO-35 max. √2.079 (2.0) min. 1.083 (27.5) Cathode Mark Mark Mark Max. Ø.020 (0.52)

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	Ptot	500 ⁽¹⁾	mW
Maximum Junction Temperature	Tj	175	°C
Storage Temperature Range	Ts	- 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	VF	-	-	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.

	Nominal	Test		Maximum	Maximum Reverse Leakage Curr		
Type Number	Zener Voltage Vz @ IzT ⁽³⁾ (Volts)	Current I _{ZT} (mA)	Maximum Zener Impedance Zzτ @ lzτ ⁽¹⁾ (Ω)	Regulator Current I _{ZM} ⁽²⁾ (mA)	Ta = 25°C IR @ VR = 1V (μA)	Ta = 150°C IR @ VR = 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 KHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (IzT) is superimposed on IzT. 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.