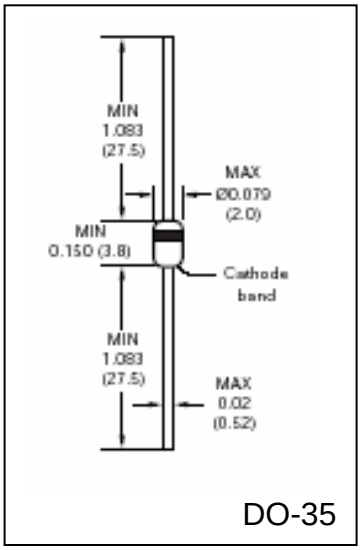
ZENER DIODE

1N746A THRU 1N759A

VOLTAGE RANGE 3.3 to 12 Volts
POWER DISSIPATION 500 mWatt

FEATURES

- Planer die construction
- General Purpose, high power device
- 500 mW power dissipation
- Standard voltage tolerance is 5%



DO-35

MECHANICAL DATA

- Case: DO-35
- Leads: Solderable per MIL-STD 750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0045 ounce, 0.13gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified

	SYMBOL	VALUE	UNIT
Device Characteristics – See table			
Power dissipation (Note 1)	P_D	500	mWatt
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	300	^{O}C/W
Operating Junction Temperature Range	T_J	(-65 to +150)	^{O}C
Storage Temperature Range	T_{STG}	(-65 to +150)	^{O}C

Notes:

1. Provided leads at a distance of 0.375” are kept at ambient temperature

Electrical Characteristics - All values at $T_A = 25^OC$ unless otherwise specified

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

Notes:

1. Zener impedance is derived from the 1KHz AC voltage which results when an AC current having and RMS value equal to 10% if the Zener current is superimposed on I_{ZT} or I_{ZK}.
2. Measured under thermal equilibrium and DC test conditions
3. Provided leads at a distance of 0.375" are kept at ambient temperature