

# 1N746A~1N759A

## AXIAL LEAD ZENER DIODES

**VOLTAGE** 3.3 to 12 Volt **POWER** 500mWatt

**DO-35**

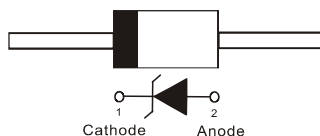
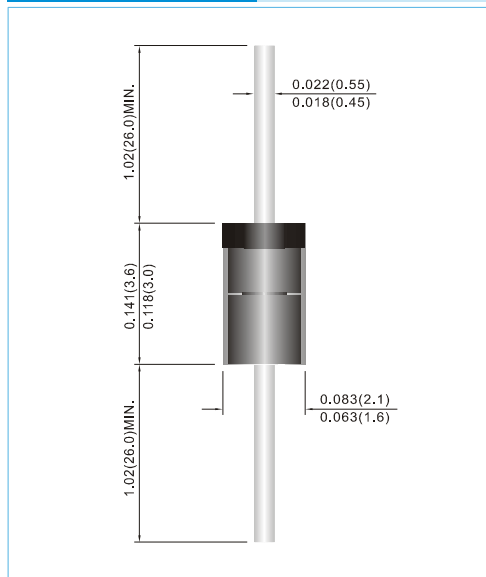
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Packing information
  - B/P - 2K per Bulk box
  - T/R - 10K per 15" plastic Reel
  - T/B - 5K per horiz. tape & Ammo box



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

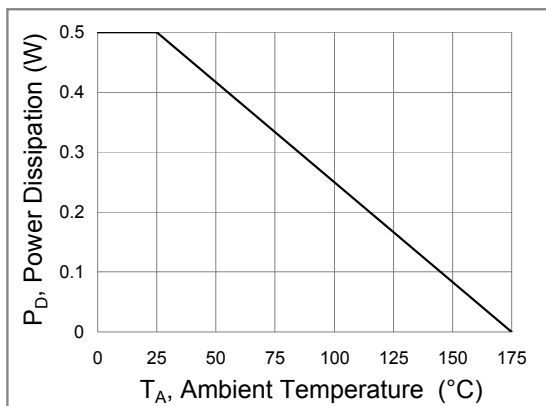
Rating	Symbol	Value	Units
Power Dissipation at T <sub>A</sub> = 25 °C	P <sub>TOT</sub>	500	mW
Maximum Thermal Resistance Junction to Ambient Air (Notes 1)	R <sub>θJA</sub>	300	°C / W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +175	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175	°C

### NOTES :

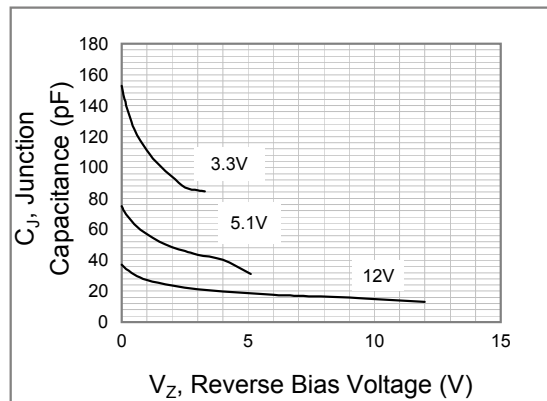
1. Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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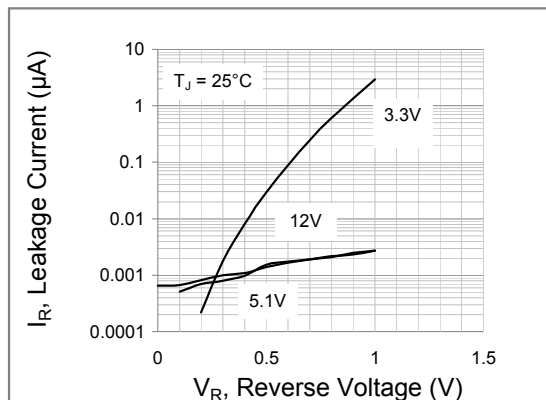
Part Number	Nominal Zener Voltage			Max. Zener Impedance		Max. Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom.V	Min.V	Max.V	Ω	mA	μA	V	
1N746A	3.3	3.135	3.465	28	20	10	1	1N746A
1N747A	3.6	3.420	3.780	24	20	10	1	1N747A
1N748A	3.9	3.705	4.095	23	20	10	1	1N748A
1N749A	4.3	4.085	4.515	22	20	2	1	1N749A
1N750A	4.7	4.465	4.935	19	20	2	1	1N750A
1N751A	5.1	4.845	5.355	17	20	1	1	1N751A
1N752A	5.6	5.320	5.880	11	20	1	1	1N752A
1N753A	6.2	5.890	6.510	7	20	0.1	1	1N753A
1N754A	6.8	6.460	7.140	5	20	0.1	1	1N754A
1N755A	7.5	7.125	7.875	6	20	0.1	1	1N755A
1N756A	8.2	7.790	8.610	8	20	0.1	1	1N756A
1N757A	9.1	8.645	9.555	10	20	0.1	1	1N757A
1N758A	10	9.50	10.5	17	20	0.1	1	1N758A
1N759A	12	11.4	12.6	30	20	0.1	1	1N759A



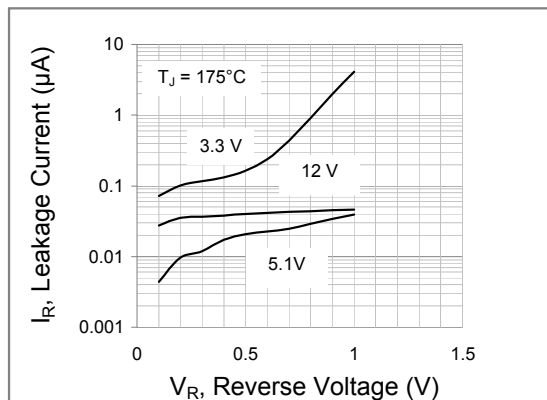
**Fig.1 Steady-State Power Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Leakage Characteristics**



**Fig.4 Typical Leakage Characteristics**

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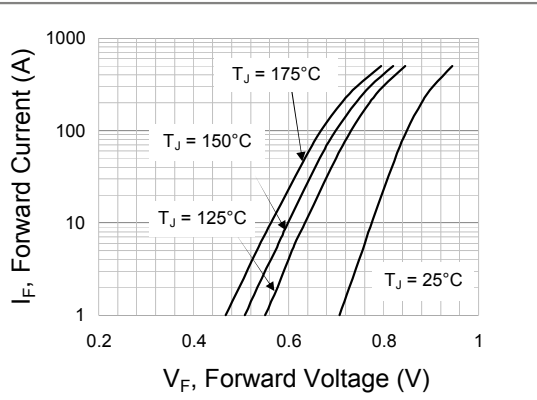


Fig.5 Typical Forward Characteristics

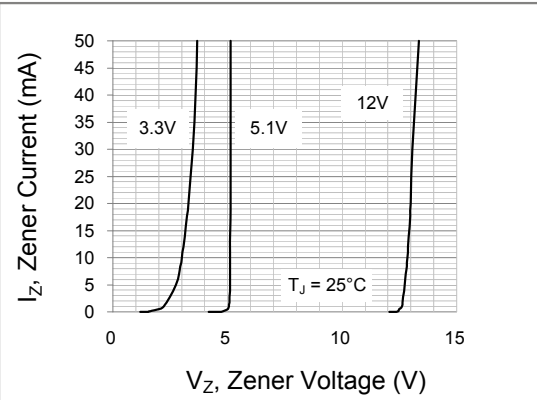


Fig.6 Typical Zener Characteristics

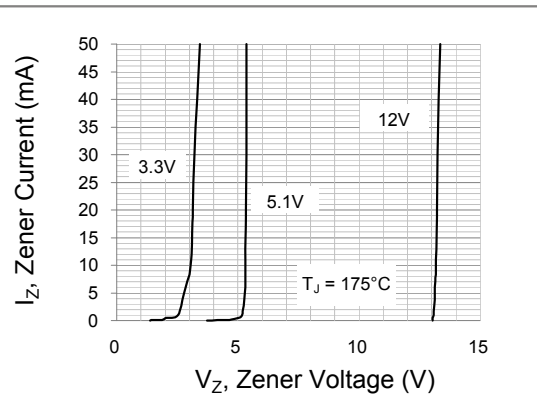


Fig.7 Typical Zener Characteristics

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## Part No\_packing code\_Version

1N746A\_AX\_10001  
 1N746A\_AY\_10001  
 1N746A\_R2\_10001  
 1N746A\_B0\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			

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