

# 1N4614 SERIES

## AXIAL LEAD ZENER DIODES

**VOLTAGE** 1.8 to 6.2 Volt **POWER** 500mWatt

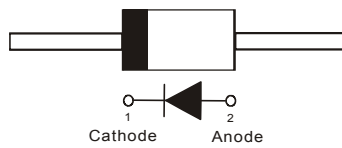
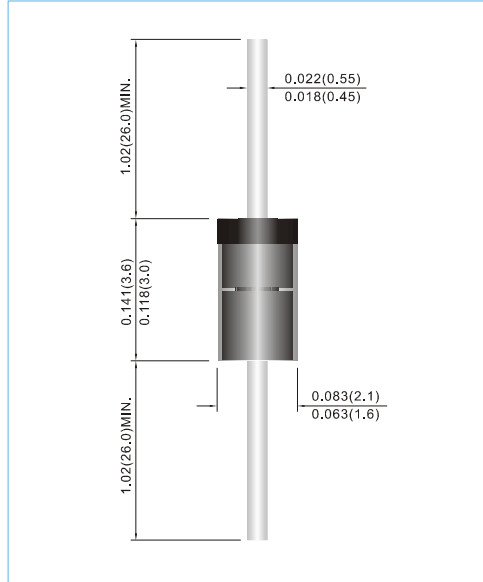
**DO-35** Unit : inch(mm)

### 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
- Approx. Weight: 0.00465 ounces, 0.131 grams
- Ordering information: Suffix : " -35 " to order DO-35 Package
- Packing information
  - B - 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 Forward Voltage at I <sub>F</sub> =100mA	V <sub>F</sub>	1	V
Maximum Thermal Resistance Junction to Ambient Air (Notes 1)	R <sub>JA</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

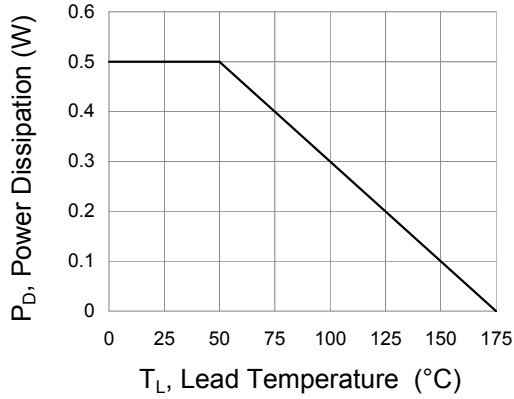
### NOTES :

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

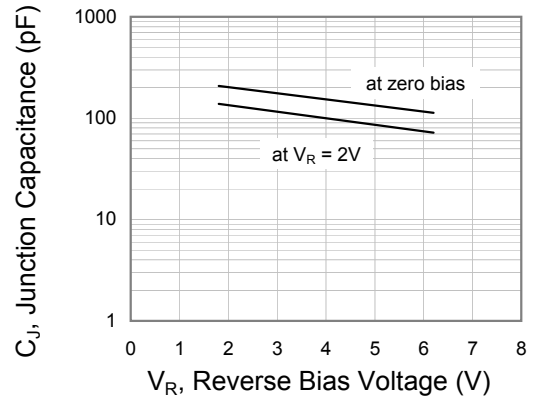
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Part Number	Nominal Zener Voltage			Max. Zener Impedance		Max. Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom.V	Min.V	Max.V	Ω	mA	μA	V	
1N4614	1.8	1.710	1.890	1200	0.25	7.5	1.0	1N4614
1N4615	2.0	1.900	2.100	1250	0.25	5.0	1.0	1N4615
1N4616	2.2	2.090	2.310	1300	0.25	4.0	1.0	1N4616
1N4617	2.4	2.280	2.520	1400	0.25	2.0	1.0	1N4617
1N4618	2.7	2.565	2.835	1500	0.25	1.0	1.0	1N4618
1N4619	3.0	2.850	3.150	1600	0.25	0.8	1.0	1N4619
1N4620	3.3	3.135	3.465	1650	0.25	7.5	1.5	1N4620
1N4621	3.6	3.420	3.780	1700	0.25	7.5	2.0	1N4621
1N4622	3.9	3.705	4.095	1650	0.25	5.0	2.0	1N4622
1N4623	4.3	4.085	4.515	1600	0.25	4.0	2.0	1N4623
1N4624	4.7	4.465	4.935	1550	0.25	10	3.0	1N4624
1N4625	5.1	4.845	5.355	1500	0.25	10	3.0	1N4625
1N4626	5.6	5.320	5.880	1400	0.25	10	4.0	1N4626
1N4627	6.2	5.890	6.510	1200	0.25	10	5.0	1N4627

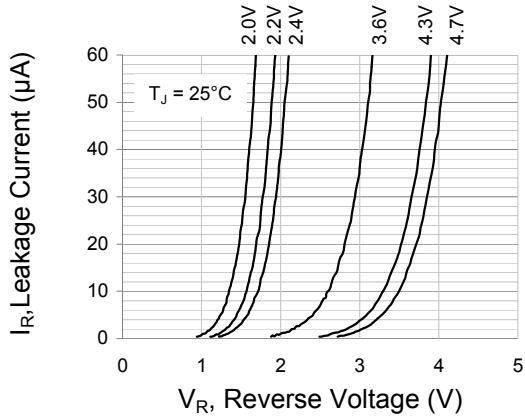
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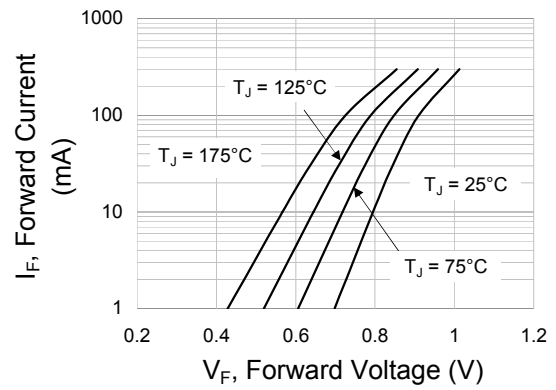
**Fig.1 Power Derating Curve**



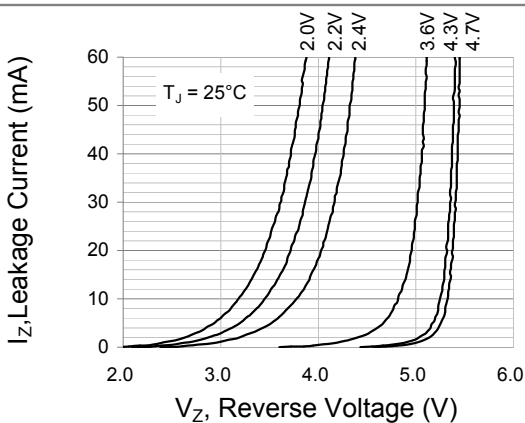
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Leakage Characteristics**



**Fig.4 Typical Forward Characteristics**



**Fig.5 Typical Zener Characteristics**

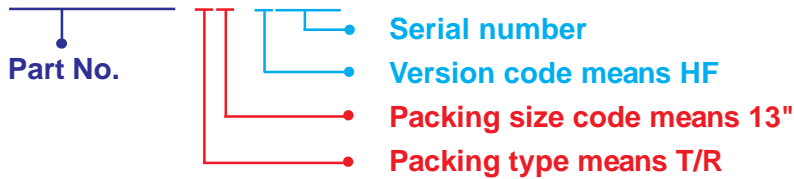
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**Part No\_packing code\_Version**

- 1N4614\_AX\_10001
- 1N4614\_AY\_10001
- 1N4614\_R2\_10001
- 1N4614\_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)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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