



TECHNICAL DATA SHEET

6 Lake Street, Lawrence, MA 01844
1-800-446-1158 / (978) 794-1666 / Fax: (978) 689-0803
Website: <http://www.microsemi.com>

400mW ZENER VOLTAGE REGULATOR DIODE

DEVICES

1N3506A through 1N3534A

MAXIMUM RATING AT 25°C

Junction and Storage Temperature: -65°C to +175°C

DC Power Dissipation: 500mW @ $T_{EC} = +125^{\circ}\text{C}$

Forward Voltage @ 200mA: 1.1 volts maximum

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$, unless otherwise specified)

Zener Type #	Zener Voltage @ I_{zt}		Zener Voltage Tolerance	Max Zener Impedance @ I_{zt} Ohms	Power Rating
	Volts	@ mA			
1N3506A	3.3	20.0	5%	24.0	400mW
1N3507A	3.6	20.0	5%	22.0	400mW
1N3508A	3.9	20.0	5%	20.0	400mW
1N3509A	4.3	20.0	5%	18.0	400mW
1N3510A	4.7	20.0	5%	16.0	400mW
1N3511A	5.1	20.0	5%	14.0	400mW
1N3512A	5.6	20.0	5%	8.0	400mW
1N3513A	6.2	20.0	5%	3.0	400mW
1N3514A	6.8	20.0	5%	3.0	400mW
1N3515A	7.5	10.0	5%	4.0	400mW
1N3516A	8.2	10.0	5%	5.0	400mW
1N3517A	9.1	10.0	5%	6.0	400mW
1N3518A	1.0	10.0	5%	7.0	400mW
1N3519A	11.0	10.0	5%	8.0	400mW
1N3520A	12.0	10.0	5%	10.0	400mW
1N3521A	13.0	5.0	5%	12.0	400mW
1N3522A	15.0	5.0	5%	14.0	400mW
1N3523A	16.0	5.0	5%	16.0	400mW
1N3524A	18.0	5.0	5%	18.0	400mW
1N3525A	20.0	5.0	5%	20.0	400mW
1N3526A	22.0	5.0	5%	35.0	400mW
1N3527A	24.0	5.0	5%	38.0	400mW
1N3528A	27.0	4.0	5%	40.0	400mW
1N3529A	30.0	4.0	5%	48.0	400mW
1N3530A	33.0	3.0	5%	50.0	400mW
1N3531A	36.0	3.0	5%	75.0	400mW



DO-35

400mW ZENER VOLTAGE REGULATOR DIODE

ELECTRICAL CHARACTERISTICS (CONT.) ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Zener Type #	Zener Voltage @ I_{ZT}		Zener Voltage Tolerance	Max Zener Impedance @ I_{ZT} Ohms	Power Rating
	Volts	@ mA			
1N3532A	39.0	3.0	5%	100.0	400mW
1N3533A	43.0	2.0	5%	130.0	400mW
1N3534A	47.0	2.0	5%	150.0	400mW

NOTE 1 : Zener Voltage is measured with the device junction in thermal equilibrium at an ambient temperature of $25^\circ\text{C} \pm 3^\circ\text{C}$.

NOTE 2 : Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT} .

NOTE 3 : ΔV_Z is the maximum difference between V_Z at I_{ZT} and V_Z at I_{ZT} measured with the device junction in thermal equilibrium.



Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
BD	.055	.107	1.40	2.72	3
BL	.120	.300	3.05	7.62	3
LD	.018	.022	0.46	0.56	
LL	1.000	1.500	25.40	38.10	
LL ₁		.050		1.27	4

NOTES:

1. Dimensions are in inches.
2. Millimeter equivalents are given for general information only.
3. Package contour optional within BD and length BL. Heat slugs, if any, shall be included within this cylinder but shall not be subject to minimum limit of BD. The BL dimension shall include the entire body including slugs.
4. Within this zone lead, diameter may vary to allow for lead finishes and irregularities other than heat slugs.
5. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

DESIGN DATA

CASE: DO-35 Hermetically sealed glass case.

LEAD FINISH : Tin/ Lead

Cathode band denotes polarity