

# 1N746A-1 thru 1N759A-1 & 1N4370A-1 thru 1N4372A-1

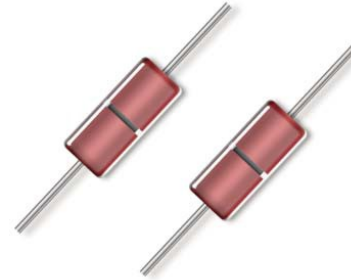


## Silicon Zener Diode Series

Rev. V1

### Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/127
- Double Plug Construction
- Metallurgically Bonded
- Axial-leaded Glass DO-35 Style Package
- Also Available in a Hermetically sealed MELF DO-213AA package



### Electrical Specifications: $T_A = +25^\circ\text{C}$ (unless otherwise specified)

JEDEC Type # <sup>1</sup>	Nominal Zener Voltage $V_Z @ I_{ZT}$	Zener Test Current <sup>2</sup> $I_{ZT}$	Maximum Zener Impedance <sup>3</sup> $Z_{ZT} @ I_{ZT}$	Maximum Reverse Current $I_R @ V_R$		Maximum Zener Current
	V	mA	$\Omega$	$\mu\text{A}$	V	mA
1N746A-1	3.3	20	24	5	1.0	120
1N747A-1	3.6	20	22	3	1.0	110
1N748A-1	3.9	20	20	2	1.0	100
1N749A-1	4.3	20	18	2	1.0	90
1N750A-1	4.7	20	15	5	1.5	85
1N751A-1	5.1	20	14	5	2.0	75
1N752A-1	5.6	20	8	5	2.5	70
1N753A-1	6.2	20	3	5	3.5	65
1N754A-1	6.8	20	3	2	4.0	60
1N755A-1	7.5	20	4	2	5.0	55
1N756A-1	8.2	20	5	1	6.0	50
1N757A-1	9.1	20	6	1	7.0	45
1N758A-1	10.0	20	7	1	8.0	40
1N759A-1	12.0	20	10	1	9.0	35
1N4370A-1	2.4	20	30	100	1.0	155
1N4371A-1	2.7	20	30	60	1.0	140
1N4372A-1	3.0	20	29	30	1.0	125

1. Zener voltage tolerance on "A" suffix is +5%. No Suffix denotes +10% tolerance, "C" suffix denotes +2% tolerance and "D" suffix denotes +1% tolerance.
2. Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of  $25^\circ\text{C} + 3^\circ\text{C}$ .
3. Zener impedance is derived by superimposing on  $I_{ZT}$  A 60Hz rms a.c. current equal to 10% of  $I_{ZT}$

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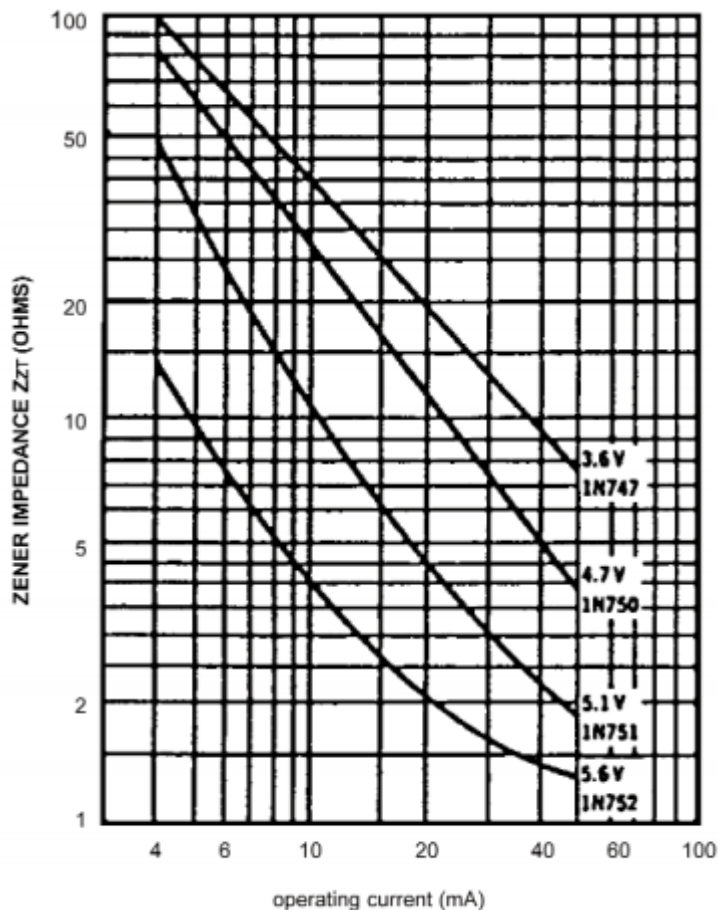
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### Absolute Maximum Ratings

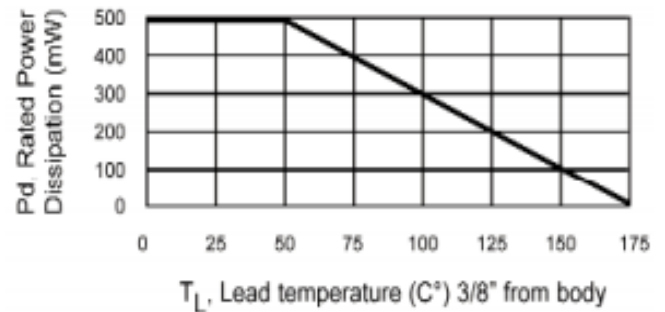
Parameter	Absolute Maximum
Forward Voltage	1.1 V @ 200 mA
DC Power Dissipation	500 mW @ +50°C
Power Derating	4 mW/°C above +50°C
Thermal Resistance	250°C/W @ L = 0.375 in.
Thermal Impedance	25°C/W
Operating & Storage Temperature	-65°C to +175°C

### Typical Performance Curves

Zener Impedance vs. Operating Current



Power Derating Curve



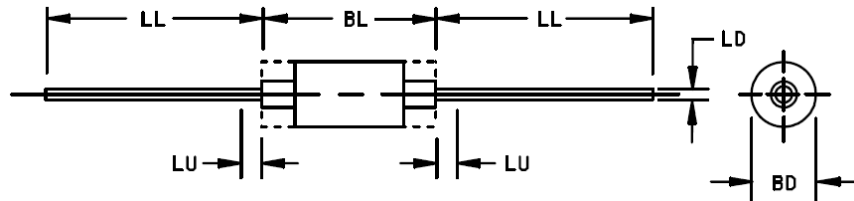
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### Outline



Symbol	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
BD	0.055	0.090	1.40	2.29	3
BL	0.120	0.200	3.05	5.08	4
LD	0.018	0.023	0.46	0.58	
LL	1.000	1.500	25.40	38.10	
LU		0.050		1.27	5

#### Notes:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Dimension BD shall be measured at the largest diameter.
4. The BL dimension shall include the entire body including slugs.
5. Dimension LU shall include the sections of the lead over which the diameter is uncontrolled. This uncontrolled area is defined as the zone between the edge of the diode body and extending .050 inch (1.27 mm) onto the leads.
6. In accordance with ASME Y14.5M, diameters are equivalent to  $\Phi$ x symbology.

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