

Silicon Zener Diode Series

1N746 thru 1N759, 1N4370A thru 1N4372A

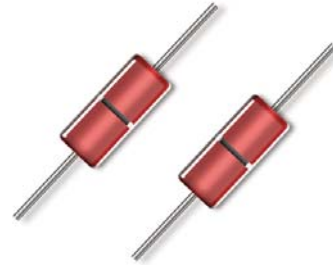


Features

- Available in JAN, JANTX and JANTXV per MIL-PRF-19500/127
- Double Plug Construction
- Metallurgically Bonded
- Also available in DO-213 MELF style package

Maximum Ratings

Operating Temperature: -65°C to +175°C
 Storage Temperature: -65°C to +175°C
 DC Power Dissipation: 500 mW @ +50°C
 Power Derating: 4 mW / °C above +50°C
 Forward Voltage @ 200mA: 1.1 volts maximum



Electrical Specifications @ +25 °C (Unless Otherwise Specified)

JEDEC TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$	ZENER TEST CURRENT I_{ZT} (NOTE 2)	MAXIMUM ZENER IMPEDANCE (NOTE 3) $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT I_{ZM}
				μA	VOLTS	
	VOLTS	mA	OHMS	μA	VOLTS	mA
1N4370A	2.4	20	30	100	1.0	155
1N4371A	2.7	20	30	60	1.0	140
1N4372A	3.0	20	29	30	1.0	125
1N746A	3.3	20	28	5	1.0	120
1N747A	3.6	20	24	3	1.0	110
1N748A	3.9	20	23	2	1.0	100
1N749A	4.3	20	22	2	1.0	90
1N750A	4.7	20	19	5	1.5	85
1N751A	5.1	20	17	5	2.0	75
1N752A	5.6	20	11	5	2.5	70
1N753A	6.2	20	7	5	3.5	65
1N754A	6.8	20	5	2	4.0	60
1N755A	7.5	20	6	2	5.0	55
1N756A	8.2	20	8	1	6.0	50
1N757A	9.1	20	10	1	7.0	45
1N758A	10.0	20	17	1	8.0	40
1N759A	12.0	20	30	1	9.0	35

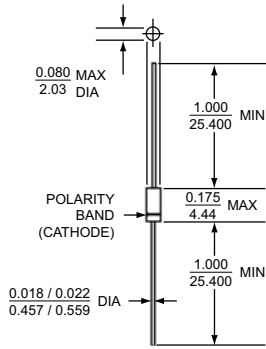
NOTE 1: Zener voltage tolerance on "A" suffix is $\pm 5\%$. No Suffix denotes $\pm 10\%$ tolerance, "C" suffix denotes $\pm 2\%$ tolerance and "D" suffix denotes $\pm 1\%$ tolerance.

NOTE 2: Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of $25^\circ C \pm 3^\circ C$.

NOTE 3: Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}



Outline Drawing



All dimensions in $\frac{\text{INCH}}{\text{mm}}$

LEADED DESIGN DATA

CASE: Hermetically sealed, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

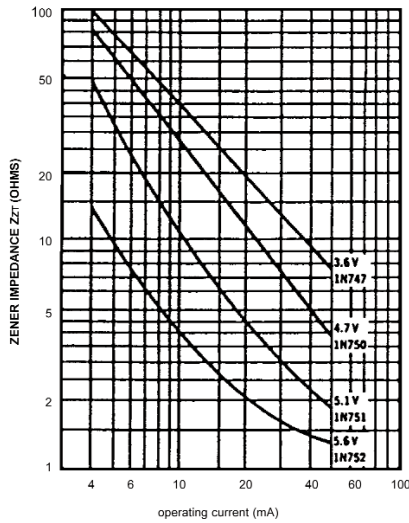
THERMAL RESISTANCE: ($R_{\theta JEC}$): 250 °C/W maximum at L = .375 in

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 35° C/W maximum

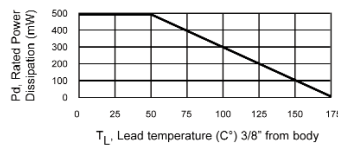
POLARITY: Diode to be operated with the banded (cathode) end positive

MOUNTING POSITION: Any

Graphs



ZENER IMPEDANCE VS. OPERATING CURRENT



POWER DERATING CURVE

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