

Silicon Zener Diode Series

1N746 thru 1N759, 1N4370A thru 1N4372A

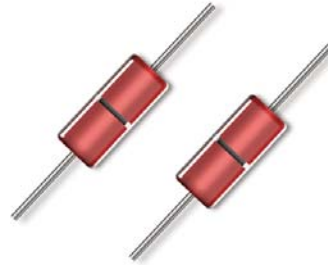


Features

- 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 1	0.0	20	17	1	8.0	40
1N759A 1	2.0	20	30	1	9.0	35

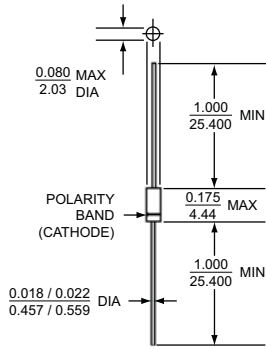
NOTE 1: Zener voltage tolerance on "A" suffix is $\pm 5\%$. No Suffix denotes $\pm 10\%$ tolerance, "C" suffix denotes $\pm 2\%$ tolerance and "D" suffix denotes $\pm 1\%$ tolerance.

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

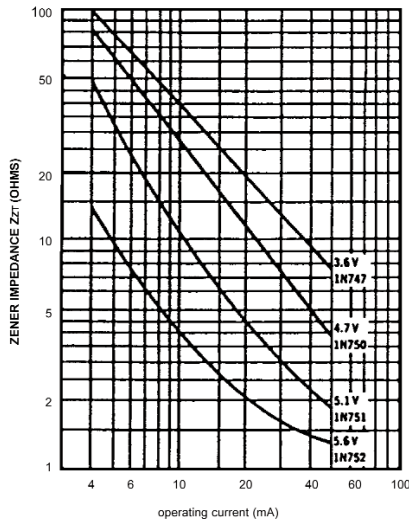
THERMAL RESISTANCE: ($R_{\theta JEC}$): 250 °C/W maximum at L = .375 in

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

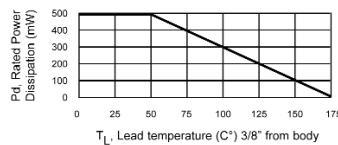
POLARITY: Diode to be operated with the banded (cathode) end positive

MOUNTING POSITION: Any

Graphs



ZENER IMPEDANCE VS. OPERATING CURRENT



POWER DERATING CURVE

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