

- 1N746A-1 THRU 1N759-1 AVAILABLE IN JAN, JANTX AND JANTXV  
PER MIL-PRF-19500/127
- 1N4370A-1 THRU 1N4372A-1 AVAILABLE IN JAN, JANTX AND JANTXV  
PER MIL-PRF-19500/127
- DOUBLE PLUG CONSTRUCTION
- METALLURGICALLY BONDED

1N746 thru 1N759A  
and  
1N746A-1 thru 1N759A-1  
and  
1N4370 thru 1N4372A  
and  
1N4370A-1 thru 1N4372A-1

## 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 CHARACTERISTICS @ 25°C

JEDEC TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z @ 1Z_T$ (NOTE 2)	ZENER TEST CURRENT $1Z_T$	MAXIMUM ZENER IMPEDANCE (NOTE 3) $Z_{ZT} @ 1Z_T$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $1Z_M$
				$\mu A$	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  $1Z_T$  A 60Hz rms a.c. current equal to 10% of  $1Z_T$

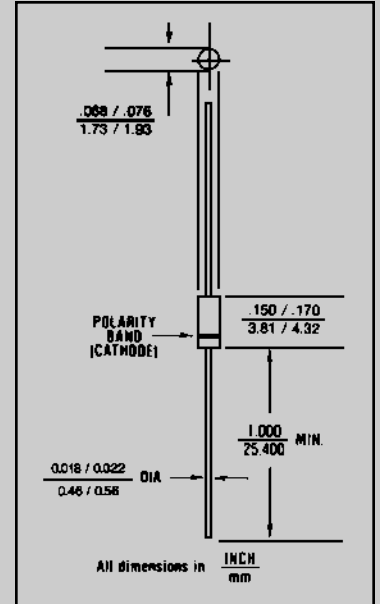


FIGURE 1

## DESIGN DATA

**CASE:** Hermetically sealed glass case. DO – 35 outline.

**LEAD MATERIAL:** Copper clad steel.

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE: ( $R_{QJEC}$ ):** 250  $^\circ C/W$  maximum at  $L = .375$  inch

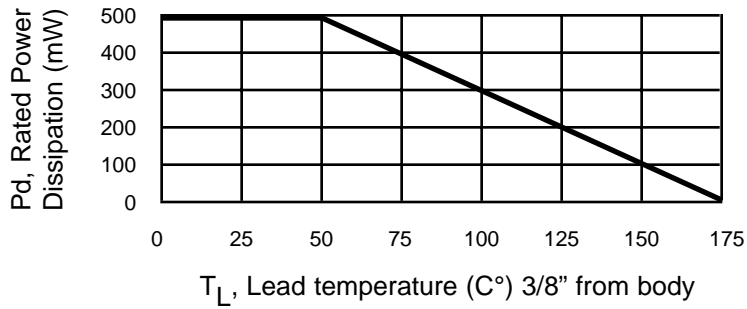
**THERMAL IMPEDANCE: ( $Z_{QJX}$ ):** 35  $^\circ C/W$  maximum

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

**MOUNTING POSITION:** Any.



# 1N746 thru 1N759A and 1N4370 thru 1N4372A INCLUDING -1 VERSIONS



**POWER DERATING CURVE**



**FIGURE 3**  
operating current (mA)

**ZENER IMPEDANCE VS. OPERATING CURRENT**