

- 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 V maximum

### ELECTRICAL CHARACTERISTICS @ 25°C

JEDEC TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (NOTE 2)	ZENER TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE (NOTE 3) $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $I_{ZM}$
				$\mu A$	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" fixtures  $\pm 5\%$ . No S fixtures  $\pm 10\%$  tolerance, "C" fixtures  $\pm 2\%$  tolerance and "D" fixtures  $\pm 1\%$  tolerance.

**NOTE 2** Zener voltage measured in the device junction in thermal equilibrium at an ambient temperature of 25°C  $\pm 3\text{C}$ .

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

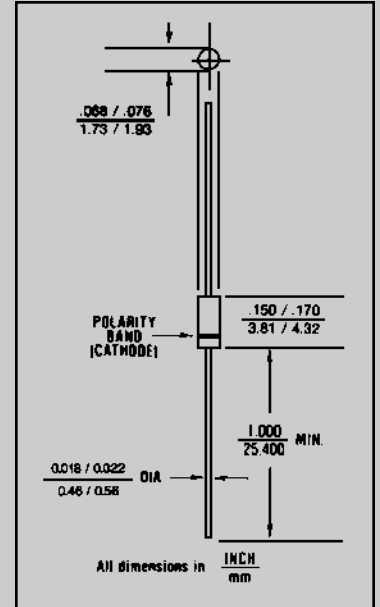


FIGURE 1

### DESIGN DATA

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

**LEAD MATERIAL:** Copper clad steel.

**LEAD FINISH:** Tin / Lead

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

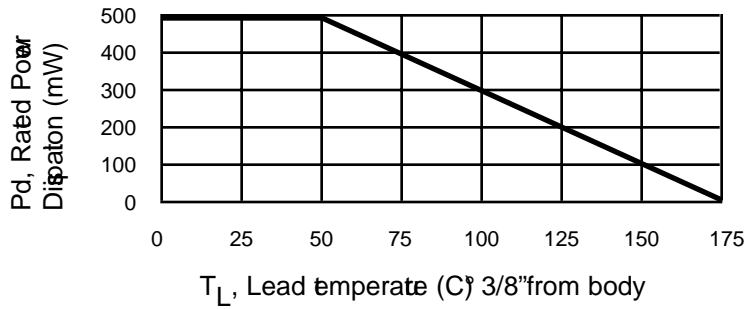
**THERMAL IMPEDANCE:** ( $Z_{\theta JX}$ ): 35 °C/W maximum

**POLARITY:** Diode to be operated in the banded (cathode) end position.

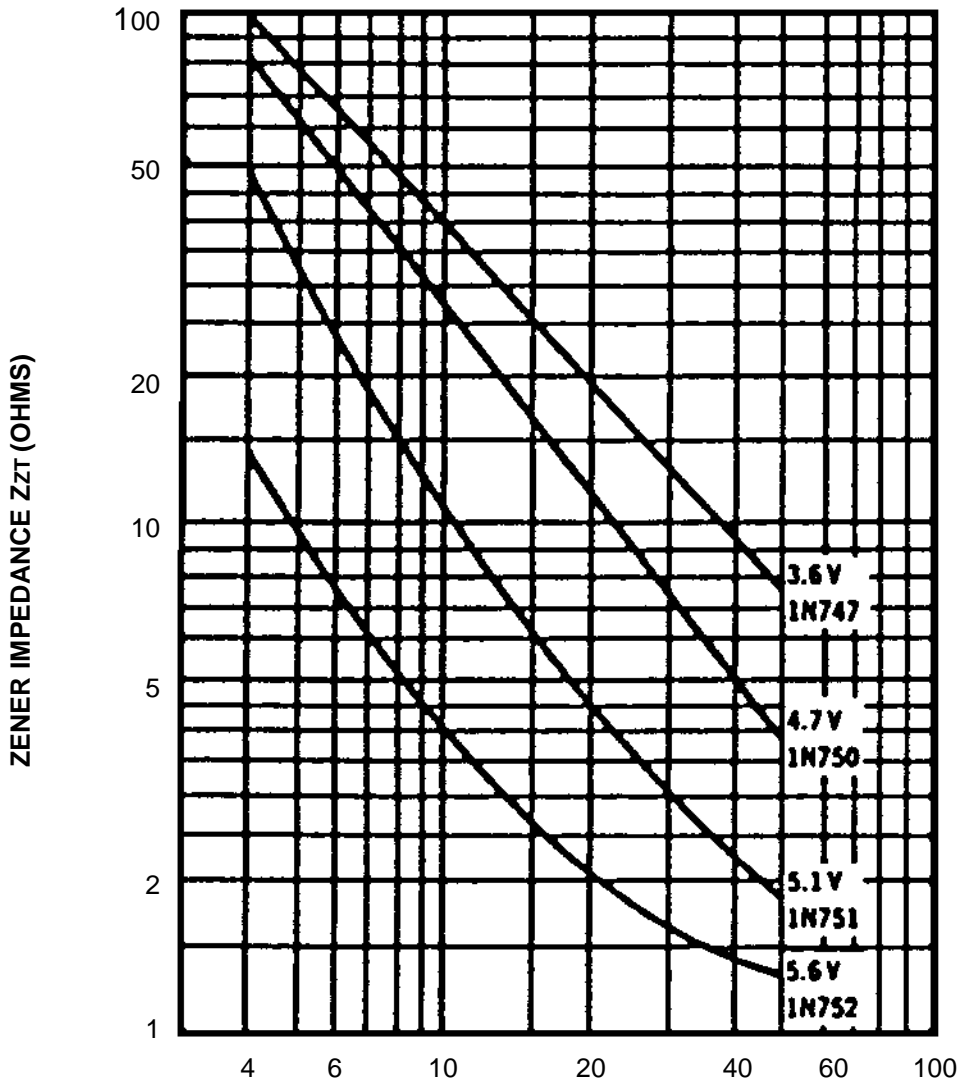
**MOUNTING POSITION:** Any



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



**POWER DERATING CURVE**



**FIGURE 3**  
operating current (mA)

**ZENER IMPEDANCE VS. OPERATING CURRENT**