

- 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 $1Z_M$ |
|----------------------------|---|---------------------------|--|-------------------------------------|-------|------------------------------|
| | | | | 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 $25^\circ\text{C} \pm 3^\circ\text{C}$.
- NOTE 3** Zener impedance is derived by superimposing on $1Z_T$ A 60Hz rms a.c. current equal to 10% of $1Z_T$

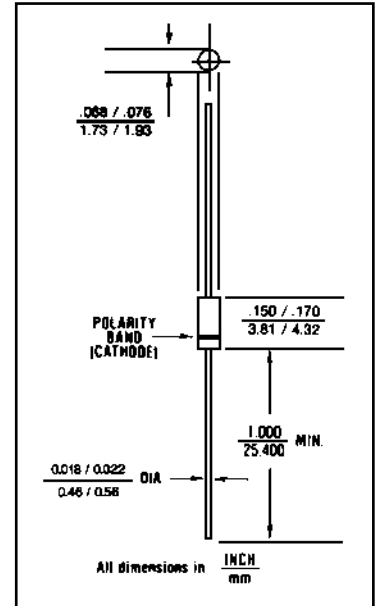


FIGURE 1

DESIGN DATA

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

LEAD MATERIAL: Copper clad steel.

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: (R_{QJEC}): 250 °C/W maximum at L = .375 inch

THERMAL IMPEDANCE: (Z_{QJX}): 35 °C/W maximum

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

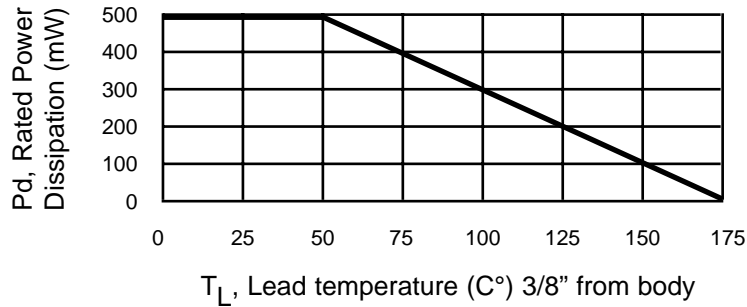
MOUNTING POSITION: Any.



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



POWER DERATING CURVE

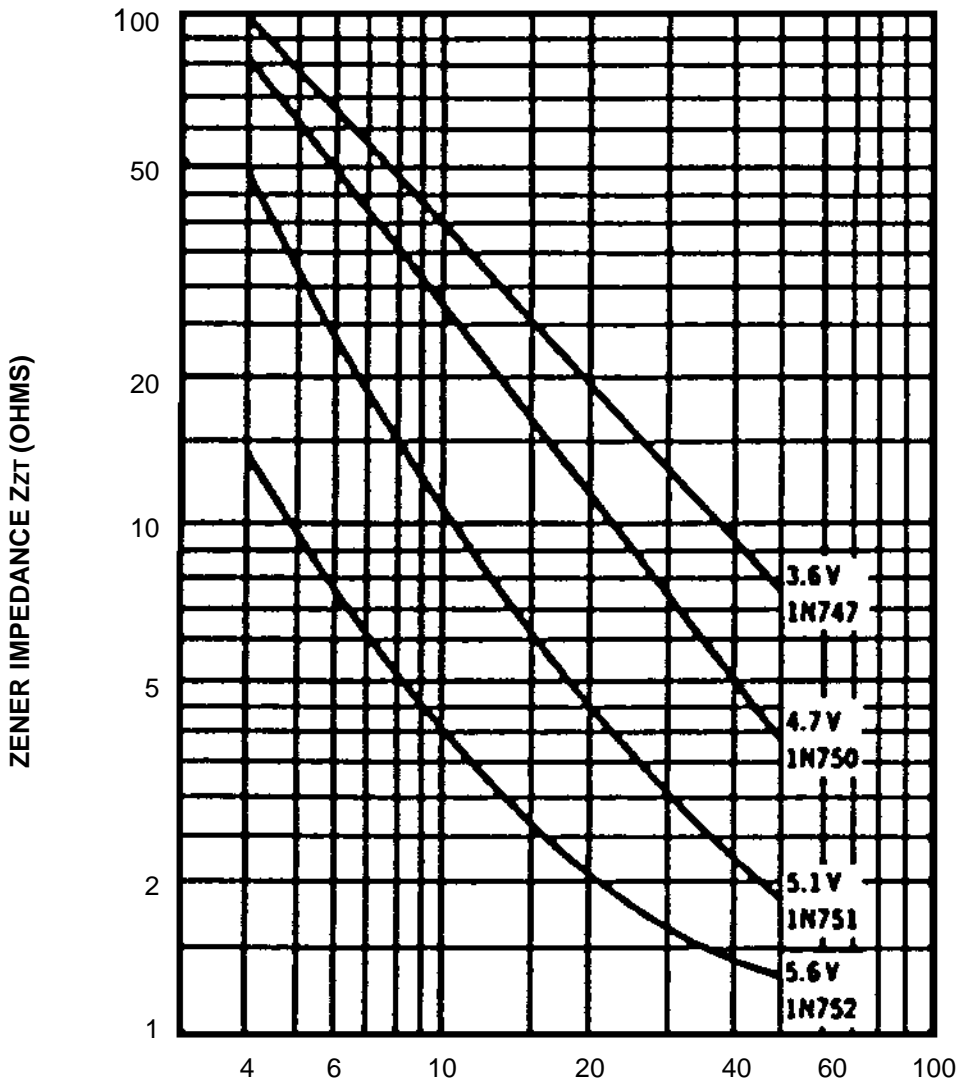


FIGURE 3
operating current (mA)

ZENER IMPEDANCE VS. OPERATING CURRENT