



Excellence in Electronics

**TYPE
1N82A**

The 1N82A is a point contact germanium diode designed for ultra-high frequency mixer applications.

MECHANICAL DATA

- ENVELOPE: Phenolic cylinder with nickel silver pins.
- TERMINAL CONNECTIONS: White Band at Cathode Terminal
- MOUNTING POSITION: Any
- WIRE-IN EQUIVALENT: Available on request

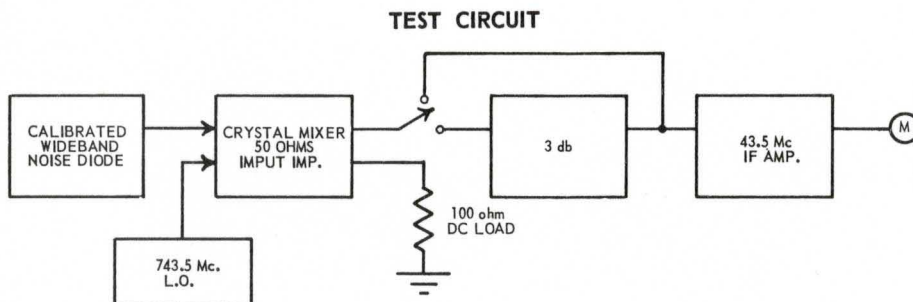
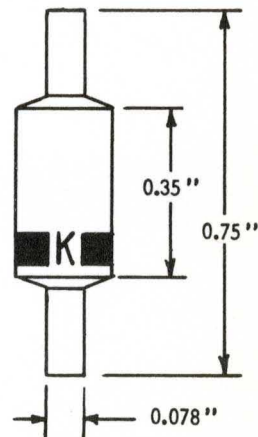
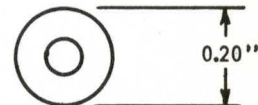
ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES: (at 25°C)

- Inverse Voltage 5 volts
- Average Rectified Current 50 ma.
- Peak Rectified Current 150 ma.
- Surge Current (for 1 sec.) 500 ma.
- Ambient Temperature Range -50 to +100 °C

CHARACTERISTICS: (at 25°C)

- Frequency Range 450-900 Mc/s.
- Maximum Conversion Loss 8 db.
- Injection Current Range 0.5-4.5 ma.
- IF Impedance (Real Component ▲) ♦ 450 ohms
- Maximum Overall Noise Figure as Measured in Test Circuit 14 db.



- IF Load 500 ohms
- Local Oscillator Drive 0.5 Ma.
- Maximum DC Load (Standard Meter) 100 ohms
- Source Impedance 50 ohms
- IF Amplifier Noise Figure 4.5 db

▲ The reactive component is negligible.
 ♦ Measured at an injection current of 0.5 ma.

Tentative Data

RAYTHEON MANUFACTURING COMPANY

RECEIVING AND CATHODE RAY TUBE OPERATIONS