The 1N68 is a hermetically sealed point contact germanium diode designed for use in general purpose rectifier applications where a reverse voltage rating up to 100 volts is required. The 1N68 is particularly applicable where small size, absence of heater voltage, low shunt capacitance and resistance to changes in humidity and temperature are important. Operable at temperatures up to 100°C, it can be heated as high as 125°C with no irreversible change in characteristics. Each diode is dynamically tested for hysteresis, drift, and flutter. The 1N68 has extremely uniform electrical characteristics and reliable mechanical stability.

**MECHANICAL DATA**

**TERMINALS:** Dumet wire, Tinned to within 1/8" of barrel

**Diameter:** 0.017" max. **Length:** 1" min.

**TERMINAL CONNECTIONS:** White Band at Cathode Terminal

**MOUNTING POSITION:** Any

**PLUG-IN EQUIVALENT:** Available as 1N68-P

**ELECTRICAL DATA**

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

- Inverse Voltage: 100 volts
- Average Rectified Current: 35 ma.
- Peak Rectified Current: 100 ma.
- Surge Current (for 1 sec.): 500 ma.
- Ambient Temperature Range: -50 to +100°C
- Dissipation at:
  - 25°C: 80 mw.
  - 50°C: 65 mw.
  - 75°C: 50 mw.
  - 100°C: 30 mw.

**CHARACTERISTICS:** (at 25°C)

- Maximum Inverse Current at -100 volts: 625 μa.
- Minimum Forward Current at +1 volt: 3.0 ma.
- Shunt Capacitance: 1.0 μFdr.
- Minimum Reverse Voltage for Zero Dynamic Resistance: 120 volts

* Each diode receives repeated humidity cycling, and additional temperature cycling ranging from -25°C to 130°C.

**TYPICAL STATIC CHARACTERISTICS** (at 25°C)

[Graph showing typical static characteristics]

Tentative Data