**MECHANICAL DATA**

- Maximum Overall Length: 2 3⁄8 Inches
- Maximum Overall Diameter: 0.814 Inches

**ELECTRICAL DATA**

**HEATER CHARACTERISTICS**
- Heater Voltage (A.C. or D.C.): 6.3 Volts
- Heater Current: 400 mA

**DIRECT INTERELECTRODE CAPACITANCES (AVERAGE)**
- Grid to Plate: 1.90 μf
- Grid to Cathode: 1.20 μf
- Plate to Cathode: 0.38 μf

**RATINGS (Absolute Values)**
- Plate Dissipation: 5.0 Watts Max.
- Seal Temperature: 175°C Max.
- Plate Voltage (Pulsed): 1500 Volts Max.
- Operating Frequency: 1750 Mc Max.

**CHARACTERISTICS**

- Conditions: (E_b = 180 volts dc, R_e = 400 ohms)
- Transconductance: 4500 μmhos
- Amplification Factor: 25
- Plate Current: 12.0 mA

**TYPICAL OPERATING CONDITIONS**

**UHF Oscillator — Plate Pulse Modulated**
- Peak Plate Voltage: 1000 Volts
- Peak Plate Current: 900 Ma
- Grid Voltage: 0 Volts
- Pulse Repetition Frequency: 2000 PPS
- Pulse Width: 2.0 μsec.
- Frequency of Operation: 1000 Mc
- Peak Power Output: 200 Watts
- Grid Voltage for I_b = 10 μa: -28 Volts

**APPLICATION DATA**

The Sylvania Type 6018 is designed for use as a pulse-modulated oscillator at frequencies up to 1200 mc. The 6018 has a built-in internal feedback circuit between cathode and anode and fits into a concentric circuit. A small amount of adjustable, external feedback is generally necessary in order to obtain optimum power output at any given frequency. A feedback probe between the output and input lines may be used. With plate-pulse modulation the grid may be operated at zero bias, eliminating the necessity of insulating the cathode from the grid in the input-line plunger. The folded plate and grid discs make this tube particularly adaptable to lumped constant and butterfly type circuits.

The Sylvania planar type construction features a stretched, parallel-wire grid that results in stable, uniform operation; a unique cathode design that minimizes discontinuities in the cathode structure; and, a disc-seal construction that satisfies the requirements for low lead inductance.