**GENERAL DATA**

**Electrical:**

Heater, for Unipotential Cathode:
- Voltage range*: 5.2 to 6.6 ac or dc volts
- Current at 6.3 volts: 0.2 amp

Direct Interelectrode Capacitances (Approx.):
- Grid to plate: 1.3 µf
- Grid to cathode and heater: 2 µf
- Plate to cathode and heater: 0.42 µf

**Characteristics, Class A1 Amplifier:**
- Plate-Supply Voltage: 120 volts
- Cathode Resistor: 220 ohms
- Amplification Factor: 24
- Plate Resistance (Approx.): 4000 ohms
- Transconductance: 5900 µmhos
- Plate Current: 12 ma

**Mechanical:**

Mounting Position: Any
- Maximum Length (Excluding flexible leads): 1-1/2"
- Length, Bulb Seat to Bulb Top (Excluding tip): 1.200" ± 0.060"
- Maximum Diameter: 0.400"
- Dimensional Outline: See General Section
- Bulb: 1-3
- Leads, Flexible: 5
- Length: 1-1/2" to 1-3/4"
- Orientation and diameter: See Dimensional Outline

**OSCIllATOR - Class C Telegraphy**

Maximum Ratings*, Absolute Values:
- DC Plate Voltage: 150 max. volts
- DC Grid Voltage: -50 max. volts
- Total Cathode Current: 40 max. ma

* Heater-voltage range and maximum ratings are established on basis that tube heater will be supplied from batteries in radiosonde and similar applications utilizing equipment designed for extreme compactness and light weight and requiring tube life of only a few hours.

**INDICATES A CHANGE**
DC GRID CURRENT.............. 10 max. ma
PLATE INPUT.................. 3.3 max. watts
PLATE DISSIPATION............. 3 max. watts
PEAK HEATER-CATHODE VOLTAGE. 0 max. volts

Typical Operation as Oscillator at 400 Mc:
DC Plate Voltage ............... 135 volts
Grid Resistor .................. 1300 ohms
DC Plate Current ............... 20 mA
DC Grid Current (Approx.) ...... 9.5 mA
Useful Power Output .......... 1.25 watts

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

Heater Current:
With 5.2 volts ac on heater... - 0.176 - amp
With 6.6 volts ac on heater... - - 0.225 amp

Direct Interelectrode
Capacitances:
Grid to plate .................. 1 1.05 1.55 μμf
Grid to cathode and heater ... 1 1.55 2.45 μμf
Plate to cathode and heater ... 1 0.345 0.495 μμf
Amplification Factor .......... 2 17 31
Transconductance .............. 3 4200 7600 μμhos
Transconductance .............. 4 4600 8000 μμhos
Plate Current ................. 3 8 16 ma
Plate Current ................. 4 9.5 18.5 ma
Plate Current ................. 5 - 300 μμamp

Note 1: Without external shield.
Note 2: With 5.2 or 6.3 volts ac on heater, dc plate-supply volts = 120, and cathode resistor (ohms) = 220.
Note 3: With 5.2 volts ac on heater, dc plate-supply volts = 120, and cathode resistor (ohms) = 220.
Note 4: With 6.3 volts ac on heater, dc plate-supply volts = 120, and cathode resistor (ohms) = 220.
Note 5: With 5.2 volts ac on heater, dc plate-supply volts = 120, dc grid volts = -12, and cathode resistor (ohms) = 220.

OPERATING CONSIDERATIONS

It is recommended that the cathode of the 6026 be connected directly to the heater.

The flexible leads of the 6026 are usually soldered to the circuit elements. Soldering of the connections should be made as far as possible from the glass button. If this precaution is not followed, the heat of the soldering operation may crack the glass seals and damage the tube.
AVERAGE PLATE CHARACTERISTICS

$E_f = 5.2 \text{ VOLTS}$