



6026

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OSCILLATOR TRIODE

SUBMINIATURE TYPE

For radiosonde service at 400 Mc

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.):^oGrid to plate 1.3 μmf Grid to cathode and heater. 2 μmf Plate to cathode and heater 0.42 μmf 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" $\pm$ 0.060" ←

Maximum Diameter. 0.400" ←

Dimensional Outline See General Section

Bulb. T-3

Leads, Flexible 5

Length. 1-1/2" to 1-3/4" ←

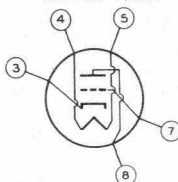
Orientation and diameter. See Dimensional Outline ←

BOTTOM VIEW

Lead 3 - Cathode

Lead 4 - Heater

Lead 5 - Heater



Lead 7 - Grid

Lead 8 - Plate

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.

^o Without external shield.

← Indicates a change.



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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

Note Min. Max.

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	μ if
Grid to cathode and heater. . .	1	1.55	2.45	μ if
Plate to cathode and heater. . .	1	0.345	0.495	μ if
Amplification Factor	2	17	31	
Transconductance	3	4200	7600	μ mos
Transconductance	4	4600	8000	μ mos
Plate Current.	3	8	16	ma
Plate Current.	4	9.5	18.5	ma
Plate Current.	5	-	300	μ amp

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.

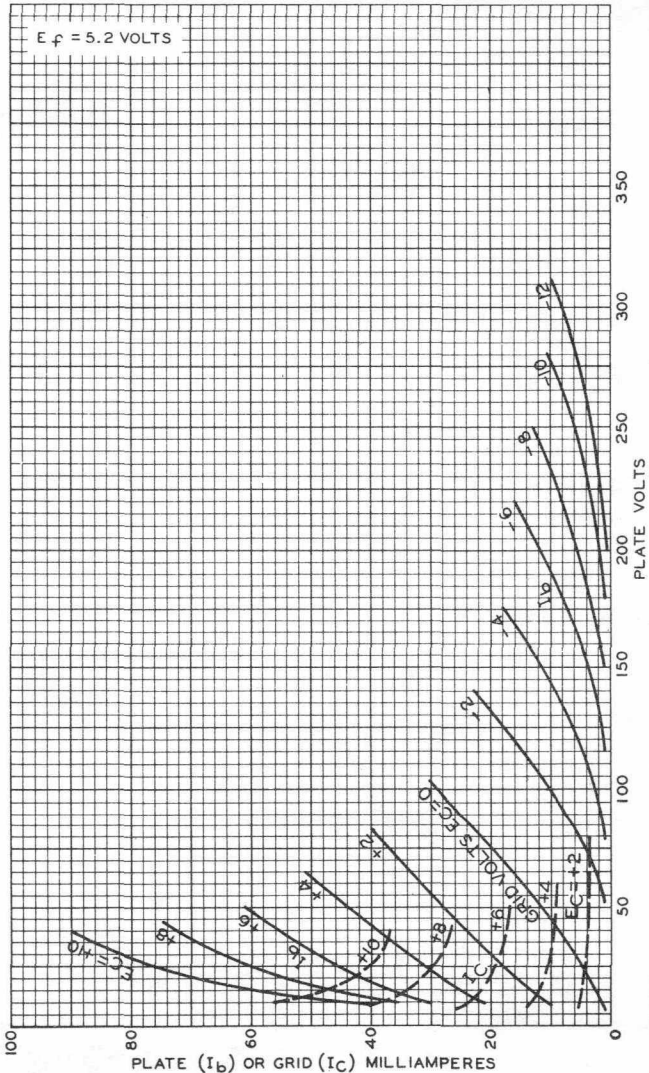
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AVERAGE PLATE CHARACTERISTICS



APRIL 16, 1951

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7640

