



7CP1

OSCILLOGRAPH TUBE

ELECTROSTATIC FOCUS, MAGNETIC DEFLECTION

7CP1

General:

Heater, for Unipotential Cathode:

Voltage. 6.3 $\pm$ 10% ac or dc volts

Current. 0.6 amp

Direct Interelectrode Capacitances (Approx.):

Grid No.1 to All Other Electrodes. . . . 8.0 μ pfCathode to All Other Electrodes. 6.5 μ pf

Phosphor (For Curves, see front of this Section) No.1

Fluorescence Green

Persistence Medium

Focusing Method. Electrostatic

Deflection Method. Magnetic

Solid Deflection Angle (Approx.) 57°

Overall Length 13-7/16" $\pm$ 3/8"Greatest Diameter of Bulb. 7" $\pm$ 1/8"

Minimum Useful Screen Diameter 6-1/2"

Cap. Recessed Small Ball

Mounting Position. Any

Base Long Medium-Shell Octal 8-Pin

Basing Designation for BOTTOM VIEW 6AZ

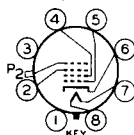
Pin 1—No Connection

Pin 2—Anode No.1

Pin 3—No Connection

Pin 4—Grid No.2

Pin 5—Grid No.1



Pin 6—Cathode

Pin 7—Heater

Pin 8—Heater

Cap—Anode No.2

Maximum Ratings, Design-Center Values:

ANODE—No.2 VOLTAGE 8000 max. volts

ANODE—No.1 VOLTAGE 2400 max. volts

GRID—No.2 VOLTAGE. 300 max. volts

GRID—No.1 VOLTAGE:

Negative bias value. 125 max. volts

Positive bias value. 2 max. volts

PEAK HEATER—CATHODE VOLTAGE:

Heater negative with respect to cathode. 125 max. volts

Heater positive with respect to cathode. 125 max. volts

Typical Operation:

Anode—No.2 Voltage*. 4000 7000 . . volts

Anode—No.1 Voltage for

Focus at 75% of Grid—No.1

Voltage for Cutoff^o 780 1365 . . volts

Grid—No.2 Voltage. 250 250 . . volts

Grid—No.1 Voltage for

Visual Cutoff**. -45 -45 . . volts

*, ^o, **: See next page.

7CPI



7CPI

OSCILLOGRAPH TUBE

- * Brilliance and definition decrease with decreasing anode-No.2 voltage. In general, the anode-No.2 voltage should not be less than 4000 volts.
- o Individual tubes may require between -30% and +20% of the values shown with grid-No.1 voltages between zero and cutoff.
- ** Visual extinction of undeflected focused spot. Supply should be adjustable to +50% of indicated value.

Maximum Circuit Values:

Grid-No.1-Circuit Resistance. 1.5 max. megohms



7CPI

Technical drawing of a vacuum tube pinout diagram. The diagram shows a cross-section of the tube with various dimensions and labels. Key features include:

- Dimensions:**
 - Top width: $7" \pm \frac{1}{8}"$
 - Screen radius: $3.083"$
 - Minimum distance: $3 \frac{1}{4}"$ MIN.
 - Left side height: $3 \frac{5}{8}" \pm \frac{1}{4}"$
 - Top right height: $2"$
 - Right side height: $6" \pm \frac{1}{4}"$
 - Bottom right height: $13 \frac{7}{16}" \pm \frac{3}{8}"$
 - Bottom right height: $12 \frac{7}{8}" \pm \frac{3}{8}"$
 - Bottom width: $1.375" \pm .055"$
 - Internal radius: $2.237"$
 - Internal radius: $1.712"$
 - Internal radius: $1.134"$
 - Internal radius: $3 \frac{1}{4}"$ R.
 - Internal radius: $2"$ R.
 - Internal radius: $3"$ R.
 - Internal radius: $20"$ R.
 - Internal radius: $7"$ R.
 - Internal angle: 28.5°
 - Internal angle: $1 \frac{1}{2}"$ R.
 - Internal angle: $2"$ R.
 - Internal angle: $3 \frac{1}{8}"$ MAX.
 - Internal angle: $.950"$ MAX.
- Labels:**
 - ANODE NO 2 RECESSED SMALL BALL CAP (NOTE 1)
 - EFFECTIVE CENTER OF DEFLECTION
 - REFERENCE LINE (NOTE 2)
 - LONG MEDIUM-SHELL OCTAL 8-PIN BASE (NOTE 3)

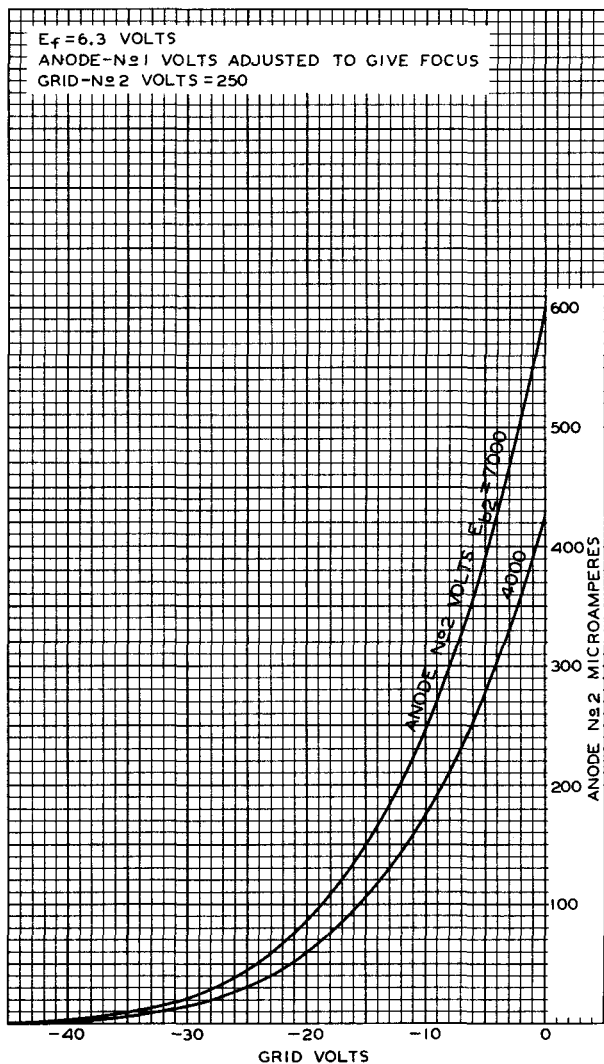
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7CPI



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AVERAGE CHARACTERISTICS



AUG. 23, 1946

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92C-6424