



I6WP4-A KINESCOPE

ROUND GLASS TYPE

MAGNETIC FOCUS

MAGNETIC DEFLECTION

I6WP4-A

DATA

General:

Heater, for Unipotential Cathode:

Voltage. 6.3 ac or dc volts

Current. 0.6 amp

Direct Interelectrode Capacitances:

Grid No.1 to All Other Electrodes. 6 μ f

Cathode to All Other Electrodes. 5 μ f

External Conductive Coating to Anode $\begin{cases} 1500 \text{ max.} \\ 750 \text{ min.} \end{cases}$ μ f

Faceplate, Spherical Filterglass

Light Transmission 66%

Phosphor (For Curves, see front of this Section) P4-Sulfide Type

Fluorescence and Phosphorescence White

Persistence of Phosphorescence Short

Focusing Method. Magnetic

Deflection Method. Magnetic

Deflection Angle (Approx.) 70°

Ion-Trap Gun Requires External Double-Field Magnet

Overall Length 17-3/4" $\pm$ 3/8"

Greatest Diameter of Bulb. 15-7/8" $\pm$ 1/8"

Minimum Screen Diameter. 14-1/2"

Mounting Position. Any

Cap. Recessed Small Cavity (JETEC No. J1-21)

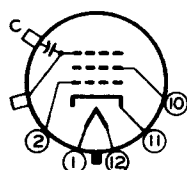
Base Small-Shell Duodecal 5-Pin (JETEC No. B5-57)

Pin 1-Heater

Pin 2-Grid No.1

Pin 10-Grid No.2

Pin 11-Cathode



Pin 12-Heater

Cap-Anode

C-External

Conduct.

Coating

Maximum Ratings, Design-Center Values:

ANODE VOLTAGE. 16000 max. volts

GRID-No.2 VOLTAGE 410 max. volts

GRID-No.1 VOLTAGE:

Negative bias value. 125 max. volts

Positive bias value. 0 max. volts

Positive peak value. 2 max. volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode:

During equipment warm-up period not

exceeding 15 seconds 410 max. volts

After equipment warm-up period 125 max. volts

Heater positive with respect to cathode. 125 max. volts

Typical Operation

Anode Voltage. 12000 volts

Grid-No.2 Voltage. 250 volts

FEB. 1, 1952

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

16WP4-A



16WP4-A

KINESCOPE

Grid-No.1 Voltage for Visual Extinction of Undelected Focused Spot.	-27 to 63	volts
Focusing-Coil Current (DC, Approx.) ^o	100	ma
Ion-Trap Current (Approx.) [†]	120	ma

Maximum Circuit Values:

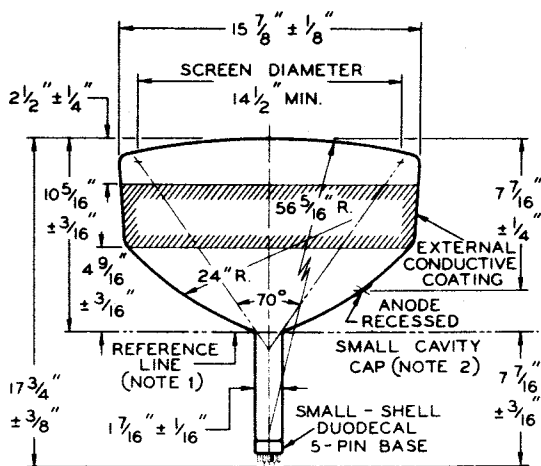
Grid-No.1-Circuit Resistance	1.5 max.	megohms
--	----------	---------

^o For specimen focusing coil similar to JETEC Focusing Coil No.106 positioned with air gap toward kinescope screen and center line of air gap 3-1/4 inches from Reference Line (see Outline Drawing). The indicated current is for condition with combined grid-No.1 bias voltage and video-signal voltage adjusted to produce a highlight brightness of 20 foot-lamberts on a 14-1/2" x 10-1/4" picture area sharply focused at center of screen.

[†] For specimen ion-trap magnet similar to JETEC Ion-Trap Magnet No.108 located in optimum position and rotated to give maximum brightness.

OPERATING NOTES

X-Ray Warning. When operated at anode voltages up to 16 kilovolts, the 16WP4-A does not produce any harmful x-ray radiation. However, because the rating of the tube permits operation at anode voltages as high as 17.6 kilovolts (absolute value), shielding of the 16WP4-A for x-ray radiation may be needed to protect against possible injury from prolonged exposure at close range whenever the operating conditions involve voltages in excess of 16 kilovolts.



NOTE 1: WITH TUBE NECK INSERTED THROUGH FLARED END OF REFERENCE-LINE GAUGE JETEC No.110 (SHOWN AT FRONT OF THIS SECTION) AND WITH TUBE SEATED IN GAUGE, THE REFERENCE LINE IS DETERMINED BY THE INTERSECTION OF THE PLANE CC' OF THE GAUGE WITH THE GLASS FUNNEL.

NOTE 2: THE PLANE THROUGH THE TUBE AXIS AND VACANT PIN POSITION No.3 MAY VARY FROM THE PLANE THROUGH THE TUBE AXIS AND ANODE TERMINAL BY AN ANGULAR TOLERANCE (MEASURED ABOUT THE TUBE AXIS) OF ± 10°. ANODE TERMINAL IS ON SAME SIDE AS VACANT PIN POSITION No.3.

FEB. 1, 1952

TUBE DEPARTMENT

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY