



I6DP4-A KINESCOPE

ROUND GLASS TYPE

MAGNETIC FOCUS

MAGNETIC DEFLECTION

I6DP4-A

DATA

General:

Heater, for Unipotential Cathode:

Voltage. 6.3 ac or dc volts

Current. 0.6 amp

Direct Interelectrode Capacitances (Approx.):

Grid No.1 to All Other Electrodes. 6 μf

Cathode to All Other Electrodes. 5 μf

Faceplate, Spherical Filterglass

Light Transmission (Approx.) 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.) 60°

Ion-Trap Gun Requires External Double-Field Magnet

Overall Length $20\text{-}3/4" \pm 1/4"$

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

Minimum Screen Diameter. $14\text{-}1/2"$

Mounting Position. Any

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

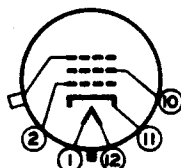
Base Small-Shell Duodecal 5-Pin (JETEC No.B5-57)

BOTTOM VIEW

Pin 1 - Heater

Pin 2 - Grid No.1

Pin 10 - Grid No.2



Pin 11 - Cathode

Pin 12 - Heater

Cap - Anode

Maximum Ratings, Design-Center Values:

ANODE VOLTAGE. 15000 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

* Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 9000 volts.

FEB. 1, 1952

TUBE DEPARTMENT

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

16DP4-A



16DP4-A KINESCOPE

Grid-No.2 Voltage.	250	volts
Grid-No.1 Voltage ^o	-27 to -63	volts
Focusing-Coil Current (DC, Approx.)†	115	ma
Ion-Trap-Magnet Current (DC, Approx.)#	110	ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance	1.5 max.	megohms
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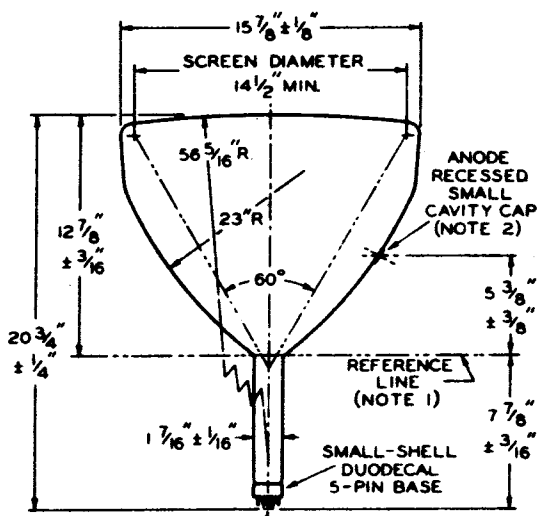
^o For visual extinction of undeflected, focused spot.

† For specimen focusing coil similar to JETEC Focusing Coil No.109 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 16DP4-A does not produce any harmful x-ray radiation. However, because the rating of the tube permits operation at voltages as high as 16.5 kilovolts (absolute value), shielding of the 16DP4-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: REFERENCE LINE IS DETERMINED BY POSITION WHERE REFERENCE-LINE GAUGE (JETEC NO.112) 1.500" + 0.003" - 0.000" I.D. AND 2" LONG WILL REST ON BULB CONE.

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 $\pm 10^\circ$. ANODE TERMINAL IS ON SAME SIDE AS VACANT PIN POSITION NO.3.

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