



12AP4

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Heater	Coated Unipotential Cathode	
Voltage	2.5	a-c or d-c volts
Current	2.1	amp.
Focus		Electrostatic
Deflection		Magnetic
Phosphor		No.4
Fluorescence		White
Persistence		Medium
Direct Interelectrode Capacitance:		
Grid No.1 to All Other Electrodes		9 μ f
Overall Length	Refer to drawings of tube and sleeve	
Maximum Diameter		
Bulb		J-96
Cap		Medium Metal
Base		Medium 6-Pin

MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS

Maximum Ratings Are Based on a Line-Voltage Design Center of 117 Volts

High-Voltage Electrode (Anode No.2) Volt.	7000 max.	volts
Focusing Electrode (Anode No.1) Volt.	2000 max.	volts
Accelerating Electrode (Grid No.2) Volt.	250 max.	volts
Control Electrode (Grid No.1) Volt.	Never positive	
Fluorescent-Screen Input Power/sq cm:		
Fixed Pattern	2.5 max.	mw
Moving Pattern	5.0 max.	mw
Grid Circuit Resistance	1.5 max.	megohms
Typical Operation:		

Typical Operation:

Cathode	{Should be connected to one side or to mid-tap of heater winding	
Anode No.2 Voltage	6000	7000 volts
Anode No.1 Voltage $\square$	1240	1460 <u>approx. volts</u>
Grid No.2 Voltage	250	250 volts
Grid No.1 Voltage $\circ$	Adjusted to give suitable luminous spot	
Grid No.1 Signal-Swing Volt. $\blacktriangle$	25	25 <u>approx. volts</u>

NOTE: Brilliance and definition decrease with decreasing anode voltages. In general the anode No.2 voltage should not be less than 6000 volts.

$\square$ Supply should be adjustable to $\pm 20\%$ of the value shown.

$\circ$ Approximately 35% of Grid No.2 voltage is required for current cut-off when, in some applications, it is necessary to use the maximum permissible grid-circuit resistance.

$\blacktriangle$ Peak-to-peak value for good brilliance with good resolution. For greater brilliance, up to twice this value should be available.

Characteristic Curves of phosphor No.4 are shown at the beginning of this section.

← Indicates a change.

Jan. 30, 1942

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

DATA

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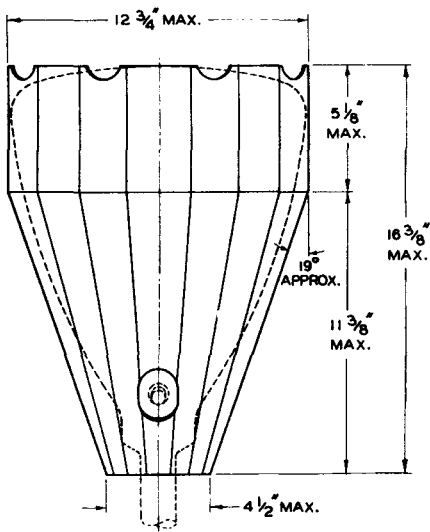


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PROTECTIVE SLEEVE

DO NOT REMOVE SLEEVE
FROM KINESCOPE

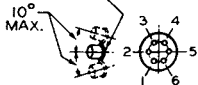
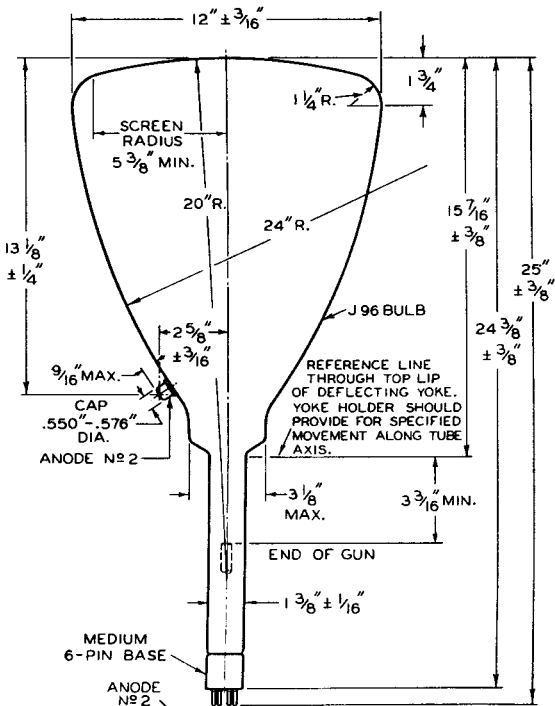




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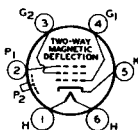
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BOTTOM VIEW OF TUBE

BOTTOM VIEW OF SOCKET CONNECTIONS



- P₂ = Anode No. 2
- P₁ = Anode No. 1
- G₂ = Grid No. 2 Electrode
- G₁ = Control (Grid No. 1) Electrode
- H = Heater
- K = Cathode

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AVERAGE CHARACTERISTICS

 $E_f = 2.5$ VOLTSFOCUSING ELECTRODE (ANODE No. 1) VOLTS
ADJUSTED TO GIVE FOCUS

CURVE	HIGH-VOLTAGE ELECTRODE (ANODE No. 2) VOLTS	ACCELERATING ELECTRODE (GRID No. 2) VOLTS
A	7000	250
B	6000	250

