



3HP7

HIGH-VACUUM CATHODE-RAY TUBE

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.6	amp.
Focusing Method		Magnetic
Deflection Method		Magnetic
Maximum Solid Deflection Angle		55 Degrees
Phosphor		No.7
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to All Other Electrodes	8.0	μf
Cathode to All Other Electrodes	6.5	μf
Overall Length	9-13/16" \pm 1/4"	
Bulb Diameter at Screen End	3" \pm 1/16"	
Minimum Useful Screen Diameter	2-1/2"	
Bulb Side Terminal	Snap Terminal	
Base	Long Medium-Shell Octal 8-Pin	
Deflection Yoke:		
Position	{ Flush with Bulb-Neck Reference Line (See <i>OUTLINE DRAWING</i>)	
Working Length for 55° Angle Deflection	2 max. inches	

Maximum Ratings Are Absolute Values

MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS

Anode (High-Voltage Electrode) Voltage	5500 max. volts		
Grid No.2 (Accelerating Electrode) Voltage	220 max. volts		
Grid No.1 (Control Electrode) Voltage	Never positive		
D-C Heater-Cathode Potential*	125 max. volts		
Grid No.1 Circuit Resistance	1.5 max. megohms		
Typical Operation:			
Anode Voltage #	4000	5000	volts
Grid No.2 Voltage	150	150	volts
Grid No.1 Voltage for Visual Cut-Off ##	-30	-30	volts
Values subject to variation of	\pm 50	\pm 50	percent

* With heater negative. If the cathode is not directly connected to the heater, the heater-cathode potential should be kept as low as possible.

Brilliance and definition decrease with decreasing anode voltage. In general, anode voltage should not be less than 4000 volts.

Visual extinction of stationary focused spot.

SPOT POSITION

The undeflected focused spot will fall within a circle of 12-mm radius concentric with the tube face.

Suitable test conditions are: anode voltage, 4000 volts; spot unfocused; the tube shielded from all extraneous fields. To avoid damage to the tube, make the test with grid No.1 voltage near cut-off.

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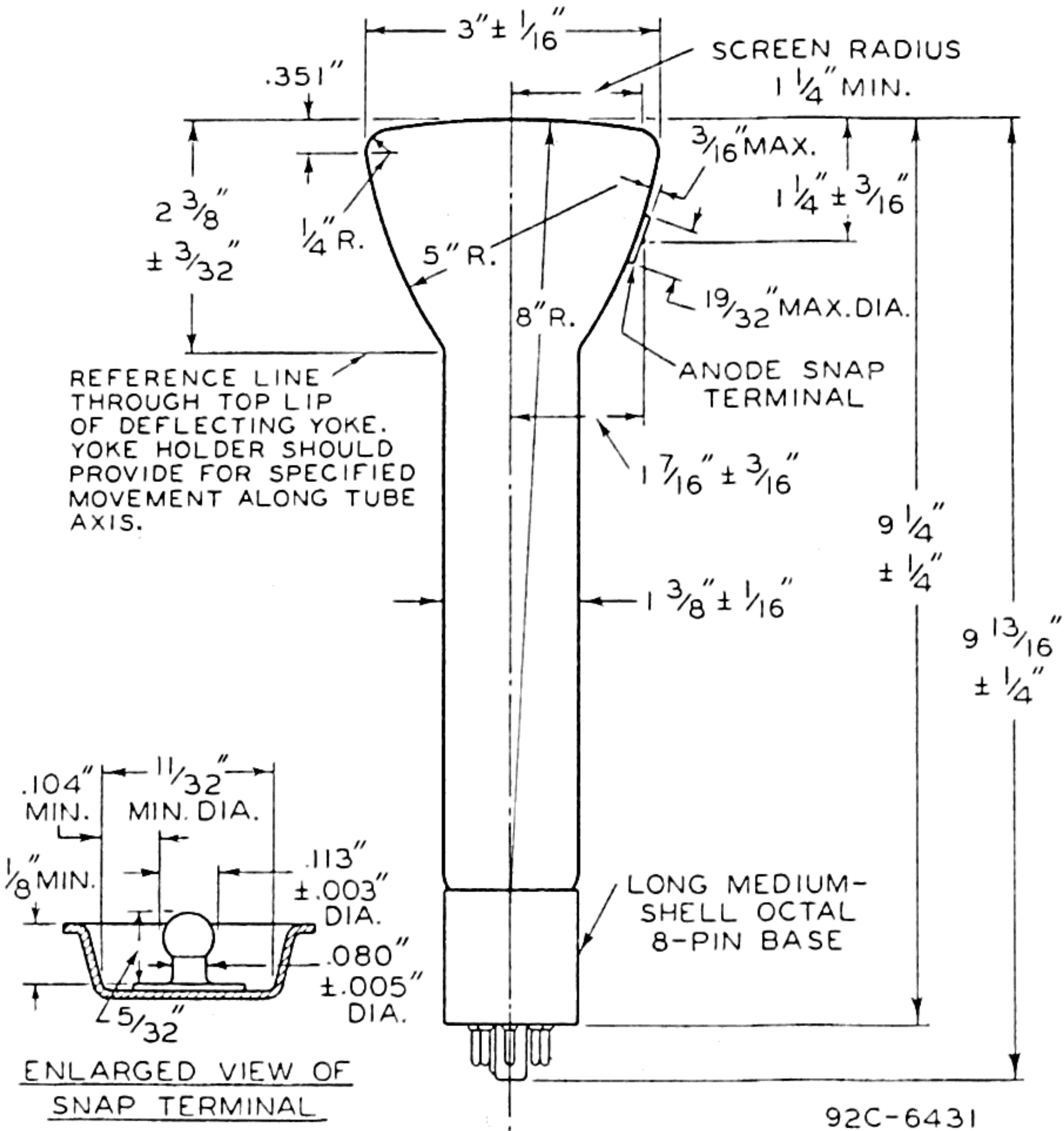
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TENTATIVE DATA



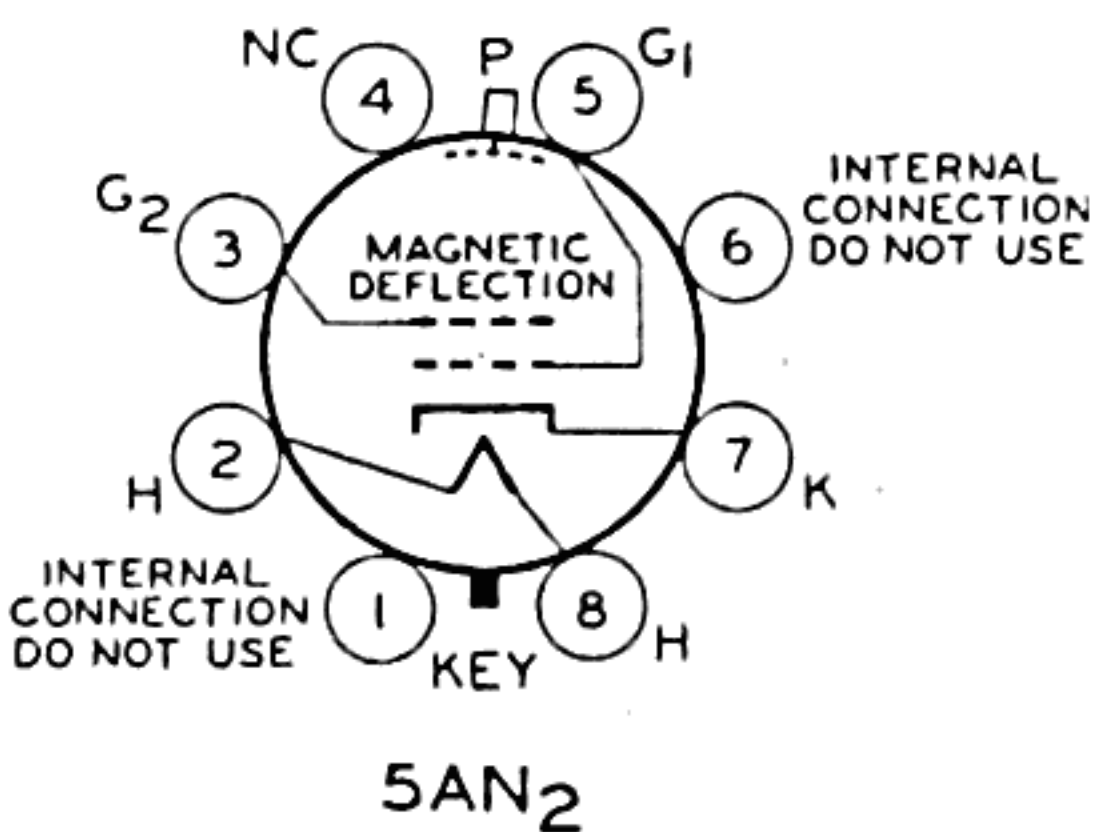
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THE PLANE THROUGH THE TUBE AXIS AND PIN 5 MAY VARY FROM THE PLANE THROUGH THE TUBE AXIS AND THE ANODE TERMINAL BY AN ANGULAR TOLERANCE (MEASURED ABOUT THE TUBE AXIS) OF 10° . ANODE TERMINAL IS ON THE SAME SIDE AS PIN 5.

TUBE MOUNTING POSITION: Any



BOTTOM VIEW OF SOCKET CONNECTIONS

- P = Anode
- G₂ = Grid No.2
- G₁ = Grid No.1
- H¹ = Heater
- K = Cathode
- NC = No Connection

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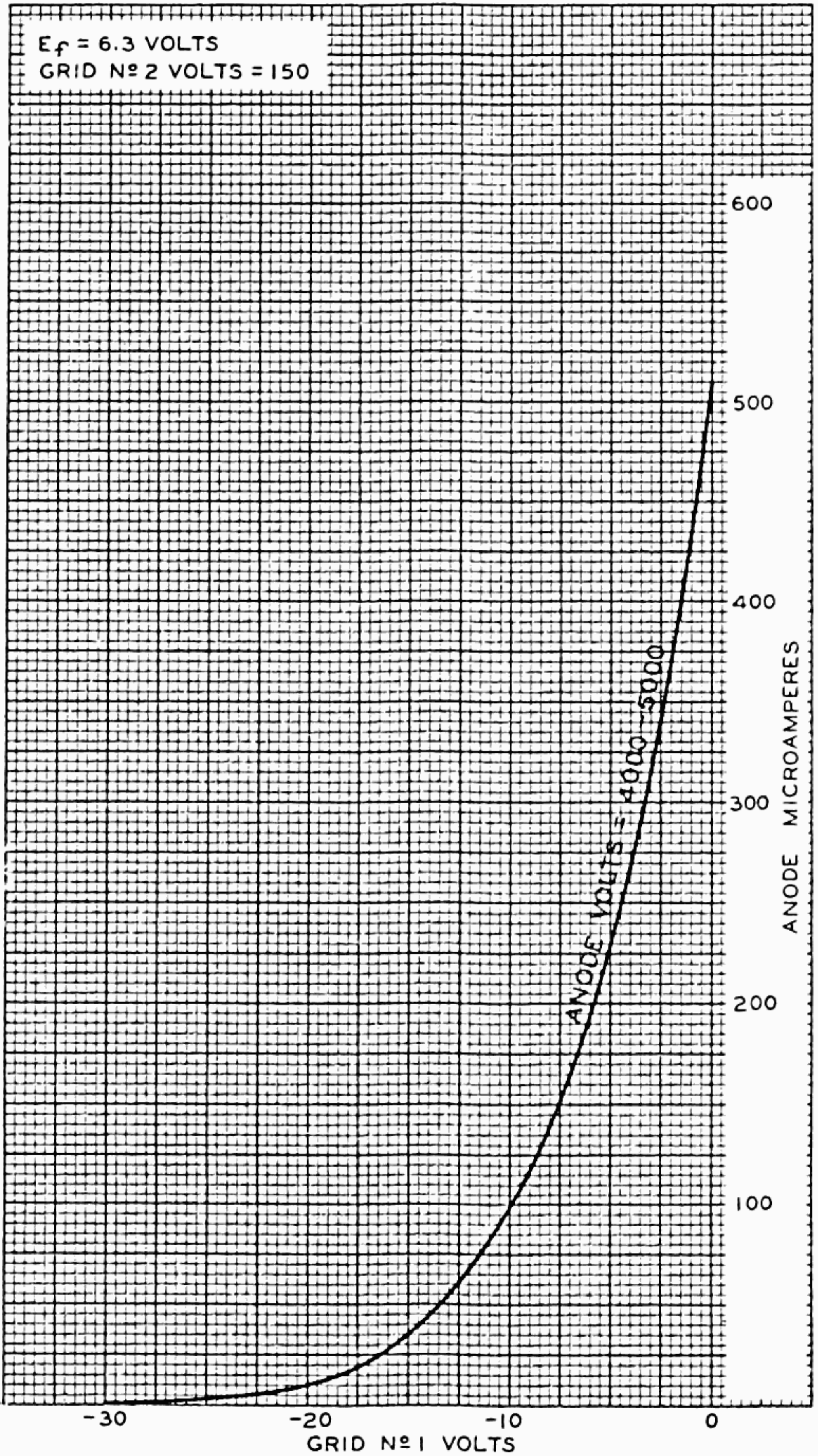
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AVERAGE CHARACTERISTIC



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