

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Electrostatic
Phosphor	P1
Fluorescence	Green
Persistence	Medium
Faceplate	Clear

**In addition to the type shown, the 3AP-A* can be supplied with several other screen phosphors.*

ELECTRICAL DATA

Heater Voltage	2.5 Volts
Heater Current (Approx.)	2.1 Ampere
Direct Interelectrode Capacitances (Approx.)	
Grid No. 1 to All Other Electrodes	9 $\mu\mu\text{f}$
Deflecting Plate 1 ¹ to All Other Electrodes	8.5 $\mu\mu\text{f}$
Deflecting Plate 3 ¹ to All Other Electrodes	6.5 $\mu\mu\text{f}$

MECHANICAL DATA

Minimum Useful Screen Diameter	2 $\frac{3}{4}$ Inches
Nominal Overall Length	11 $\frac{1}{2}$ Inches
Base	Medium 7-Pin
Basing	7CE

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode No. 2 Voltage	1650 Volts	dc
Anode No. 1 Voltage	1100 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	125 Volts	dc
Positive Bias Value	0 Volts	dc
Peak Voltage Between Anode No. 2 and Any Deflecting Plate	550 Volts	

TYPICAL OPERATING CONDITIONS

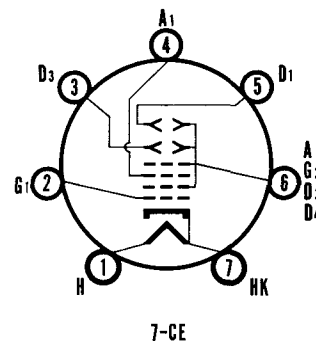
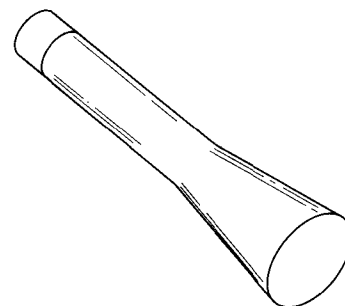
Anode No. 2 Voltage ²	1500 Volts	dc
Anode No. 1 Voltage	240 to 560 Volts	dc
Grid No. 1 Voltage Required for Cutoff ³	-25 to -75 Volts	dc
Deflection Factor ^{4,5}		
Deflecting Plates 1-2 ⁶	90 to 137 Volts dc/Inch	
Deflecting Plates 3-4 ⁷	88 to 130 Volts dc/Inch	

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
Deflection Circuit Resistance	5.0 Megohms Max.

QUICK REFERENCE DATA

3" Direct Viewed
Round Glass Type
Electrostatic Deflection
Electrostatic Focus



SYLVANIA ELECTRONIC TUBES

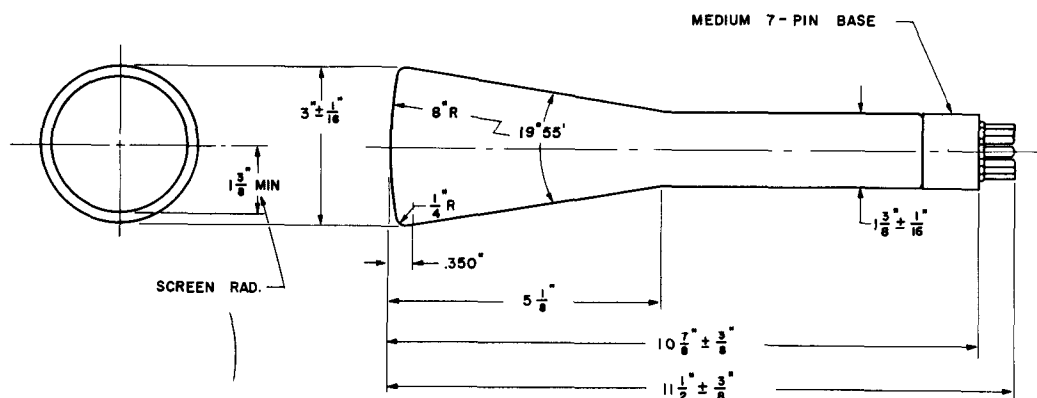
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1. With D2 positive with respect to D1, the spot is deflected toward Pin No. 1.
With D4 positive with respect to D3, the spot is deflected toward Pin No. 6.
2. Brilliance and definition decrease with decreasing Anode No. 2 Voltage. In general, Anode No. 2 Voltage should not be less than 1,000 Volts.
3. Visual extinction of undeflected focused spot.
4. The plane through the tube axis and Pin 6 may vary from the trace produced by Deflecting Plates 3-4 by an angular tolerance measured about the tube axis; of 10 degrees.
5. Angle between D1-D2 trace and D3-D4 trace is $90^{\circ} \pm 3^{\circ}$.
6. Deflecting Plates 1-2 are nearer the screen.
7. Deflecting Plates 3-4 are nearer the base.

Sylvania Type 3AP1A replaces Type 3AP1.



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