SYLVANIA

engineering data service

SYLVANIA
5AHP4A
5AHP7*

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Magnetic
Deflection Angle (Approx.)	53 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Clear

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current (Approx.)	0.6 Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes	5 μμf
Grid No. 1 to All Other Electrodes	6 μμf

MECHANICAL DATA

Minimum Useful Screen Diameter	4¼ Inches
Bulb Contact (Recessed Small Ball Cap)	J1-22
Base (Medium Shell Octal 8-Pin)	B8-11 or B8-65
Basing	8EF
Bulb Contact Aligns with Pin No. 5	±10 Degrees

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	11,000 Volts dc
Grid No. 4 (Focusing Electrode)	
Voltage	−550 to +1100 Volts dc
Grid No. 2 Voltage	770 Volts dc
Grid No. 1 Voltage	
Negative Bias Value	200 Volts dc
Positive Bias Value	0 Volts dc
Positive Peak Value	0 Volts
Peak Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	200 Volts
Heater Positive with Respect to Cathode	200 Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage[1]	7,000 Volts dc
Grid No. 4 Voltage for Focus[3]	0 to +250 Volts dc
Grid No. 2 Voltage	300 Volts dc
Grid No. 1 Voltage[2]	−33 to −77 Volts dc
Line Width[3,4]	0.40 MM Max.

CIRCUIT VALUES

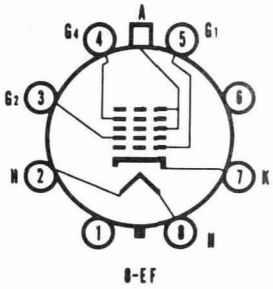
Grid No. 1 Circuit Resistance	1.5 Megohms Max.

NOTES:

1. *Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 4,000 volts.*
2. *Visual extinction of undeflected focused spot.*
3. *With Eg1 adjusted for Ib = 100 μa and beam focused for minimum width of individual lines at center of screen.*
4. *Measured by compressed raster method, using 35 to 105 line pattern.*

QUICK REFERENCE DATA

Special Purpose Tube
5″ Direct Viewed
Round Glass Type
Magnetic Deflection
Electrostatic Focus
High Resolution



SYLVANIA ELECTRIC PRODUCTS INC.
TELEVISION PICTURE TUBE DIVISION
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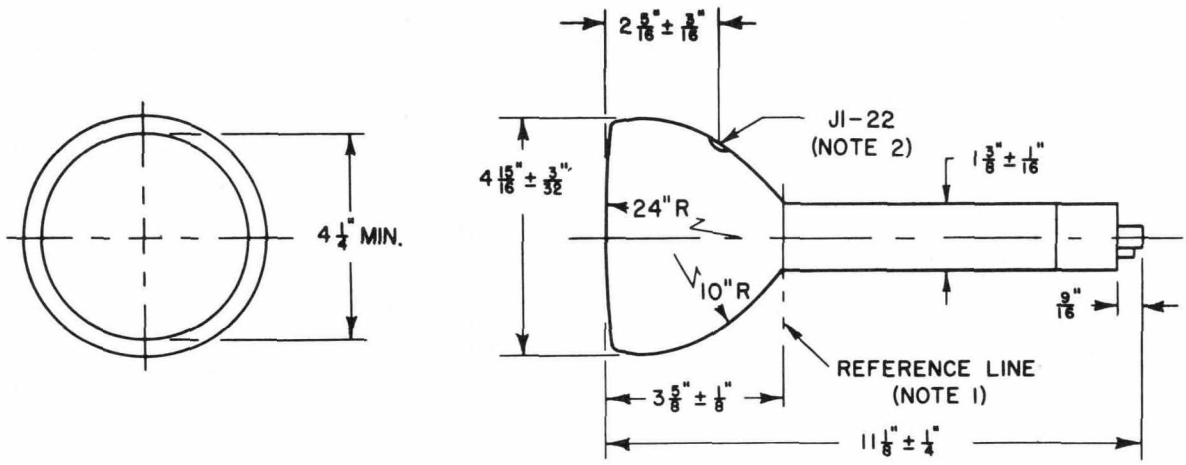

DIAGRAM NOTES:

1. *Reference line is determined by the point where 1.430 ± .003 inch diameter ring gauge 2 inches long will stop.*
2. *Anode contact (J1-22) aligns with base pin No. 5, ± 10°.*

*5AHP7

Type 5AHP7 is similar to 5AHP4A except that it has non-aluminized P7 phosphor, which has blue-white fluorescence, yellow phosphorescence and long persistence.

Type 5AHP—can be supplied with several other phosphors, either aluminized or non-aluminized, on special order. Aluminized types are identified by the suffix "A" on the type number.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.