

CHARACTERISTICS

GENERAL DATA

Focusing Method Magnetic
Deflecting Method Magnetic
Deflection Angles (Approx.) 53 Degrees

Types*	5FP4A	5FP7A	5FP11A	5FP14A
Fluorescence . .	White	Blue-White	Blue	Blue
Phosphorescence	White	Yellow	—	Orange
Persistence . .	Medium	Long	Short	Medium-Long
Faceplate	Clear			

*In addition to the types shown, the 5FP-A can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage 6.3 Volts
Heater Current (Approx.) $0.6 \pm 10\%$ Ampere
Direct Interelectrode Capacitances (Approx.)
Cathode to All Other Electrodes $5 \mu\text{f}$
Grid No. 1 to All Other Electrodes $8 \mu\text{f}$

MECHANICAL DATA

Minimum Useful Screen Diameter $4\frac{1}{4}$ Inches
Nominal Overall Length $11\frac{1}{8}$ Inches
Bulb Contact (Recessed Small Ball Cap) J1-22
Base (Medium Shell Octal 5-Pin or 8-Pin) B8-11, B8-65 or B5-80
Basing 5AN
Bulb J39 $\frac{1}{2}$ L

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

	5FP4A	5FP7A 5FP11A 5FP14A	
Anode Voltage ¹	8800	8800 Volts	dc
Grid No. 2 Voltage	450	770 Volts	dc
Grid No. 1 Voltage			
Negative Bias Value	140	200 Volts	dc
Positive Bias Value	0	0 Volts	dc
Positive Peak Value	2	2 Volts	
Peak Heater-Cathode Voltage			
Heater Negative with Respect to Cathode	165	200 Volts	
Heater Positive with Respect to Cathode	165	200 Volts	

TYPICAL OPERATING CONDITIONS

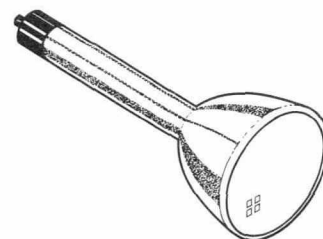
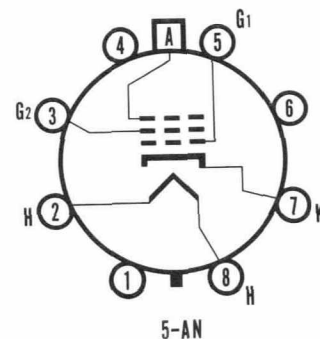
Anode Voltage ²	6,000	4,000 Volts	dc
Grid No. 2 Voltage	250	250 Volts	dc
Grid No. 1 Voltage ³	-25 to -70	-25 to -70 Volts	dc
Focusing Coil Current (Approx.) ^{4,5}	$120 \pm 15\%$	$96 \pm 15\%$ Ma	dc
Spot Position (Undelected) ⁶		9 mm	
Line Width A ⁷		.010 in.	Max

CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms Max.

QUICK REFERENCE DATA

5FP4A: Monitor Tube
5FP7A, 5FP14A; Radar Indicator Tubes
5FP11A: Photo Recorder Tube
5" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus



SYLVANIA ELECTRONIC TUBES

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File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

NOTES:

1. The product of the anode voltage and the average anode current should be limited to 6 watts.
2. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 4,000 volts.
3. Visual extinction of undeflected focused spot.
4. This note applies to Type 5FP4A only. For specimen focusing coil similar to JEDEC focusing coil No. 106 positioned with air gap toward cathode ray tube screen and center line of air gap $3\frac{1}{4}$ inches from reference line. The indicated current is for condition with combined Grid No. 1 bias voltage and video—signal voltage adjusted to produce a highlight of 10 foot lamberts on a $3\frac{7}{8} \times 2\frac{7}{8}$ inch picture area sharply focused at center of the screen.
5. This note applies to Types 5FP7A, 5FP11A, 5FP14A. For JEDEC focus coil No. 106 or equivalent, with the Grid No. 1 voltage adjusted to produce an accelerator current of 200 μ amps and with distance from reference line to center of air gap equal to $2\frac{3}{4}$ inches.
6. The center of the undeflected unfocused spot will fall within a circle of 9 mm radius concentric with the center of the tube face.
7. Measured in accordance with MIL-E-1 specification, at anode current of 200 μ a. This value applies to 5FP11A and 5FY14A. Value for 5FP7A is .020" Maximum.

OUTLINE

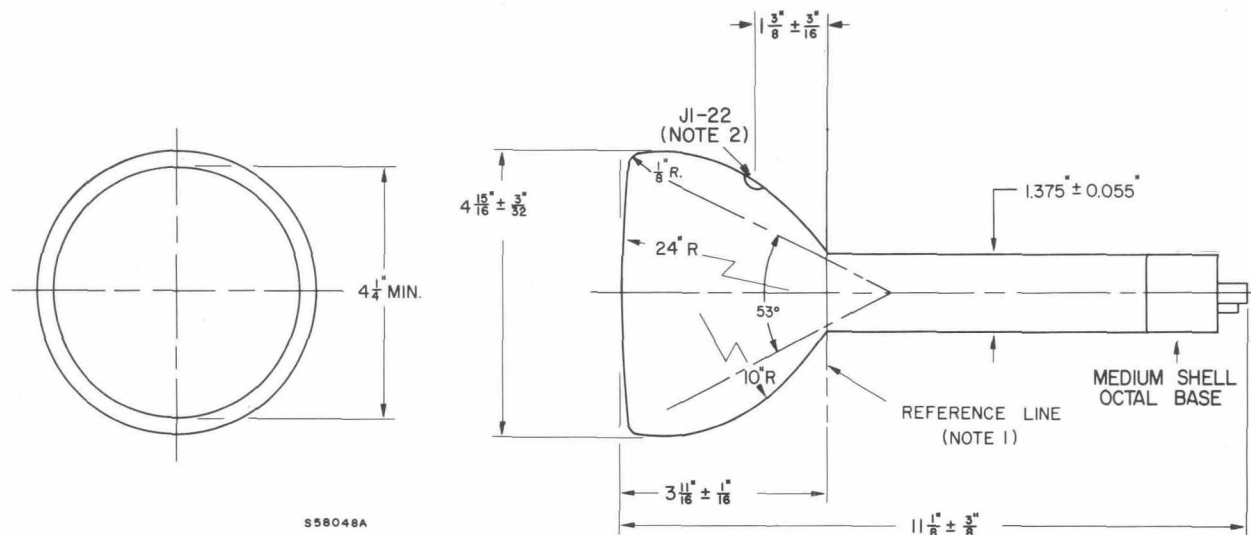


DIAGRAM NOTES:

1. Reference line is determined by position where JEDEC Gauge #124 (a cylinder $1.430 + .003 - .000$ " ID and 2" long) will seat against cone of bulb.
2. The plane through the tube axis and Pin No. 5 may vary from the plane through the tube axis and anode terminal by an angular tolerance (measured about the tube axis) of 10°. Anode terminal is on same side of tube as Pin No. 5.