

CHARACTERISTICS

GENERAL DATA

Focusing Method		Magnetic
Deflection Method		Magnetic
Deflection Angle (Approx.)		53 Degrees
Types*	7BP2A	7BP7A
Fluorescence	Green	Blue
Phosphorescence	—	Yellow
Persistence	Long	Long
Faceplate		Clear

*In addition to the types shown, the 7BP-A can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	$0.6 \pm 10\%$ Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes	5 μmf
Grid No. 1 to All Other Electrodes	8.5 μmf
Grid No. 2 to All Other Electrodes	7 μmf

MECHANICAL DATA

Minimum Useful Screen Diameter	6 Inches
Bulb	J56R or Equivalent
Bulb Contact (Recessed Small Cavity Cap)	J1-22
Base (Long Medium-Shell Octal 8-Pin)	B8-65
or (Long Medium-Shell Octal 5-Pin)	B5-80
Basing	5AN
Weight (Approx.)	3 Pounds

RATINGS

MAXIMUM RATINGS

Anode Voltage	8,800 Volts	dc
Grid No. 2 Voltage	770 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	200 Volts	dc
Positive Bias Value ¹	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	140 Volts	
Heater Positive with Respect to Cathode	140 Volts	

TYPICAL OPERATING CONDITIONS

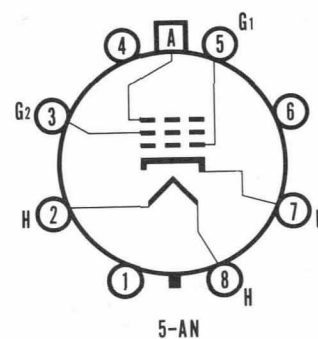
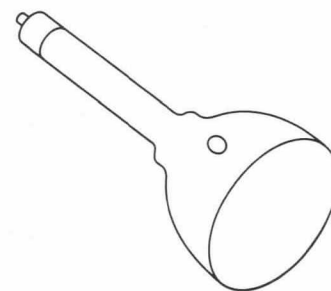
Anode Voltage ²	4000	7000 Volts	dc
Grid No. 2 Voltage	250	250 Volts	dc
Grid No. 1 Voltage for Cutoff ³	-25 to -70	-25 to -70 Volts	dc
Focusing-Coil Current ⁴	75 to 102	99 to 135 Ma	dc
Spot Position		See Note 5	

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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QUICK REFERENCE DATA

Radar Indicator
7" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus



SYLVANIA ELECTRONIC TUBES

A Division of
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NOTES:

1. At or near this rating, the effective resistance of the anode supply should be adequate to limit the anode input power to 6 watts.
2. Brilliance and definition decrease with decreasing anode voltage. In general, anode voltage should not be less than 4,000 volts.
3. Visual extinction of undeflected focused spot.
4. For JETEC Focusing Coil No. 106, or equivalent, with center line of air gap approximately $2\frac{3}{4}$ inches from reference line (See Outline Drawing) and total anode current of 200 microamperes.
5. The center of the undeflected, unfocused spot will fall within a circle having 12 mm radius concentric with the center of the tube face.

7BP7

Sylvania Type 7BP7A replaces Type 7BP7.

WARNING:

X-ray radiation shielding may be necessary to protect against 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.

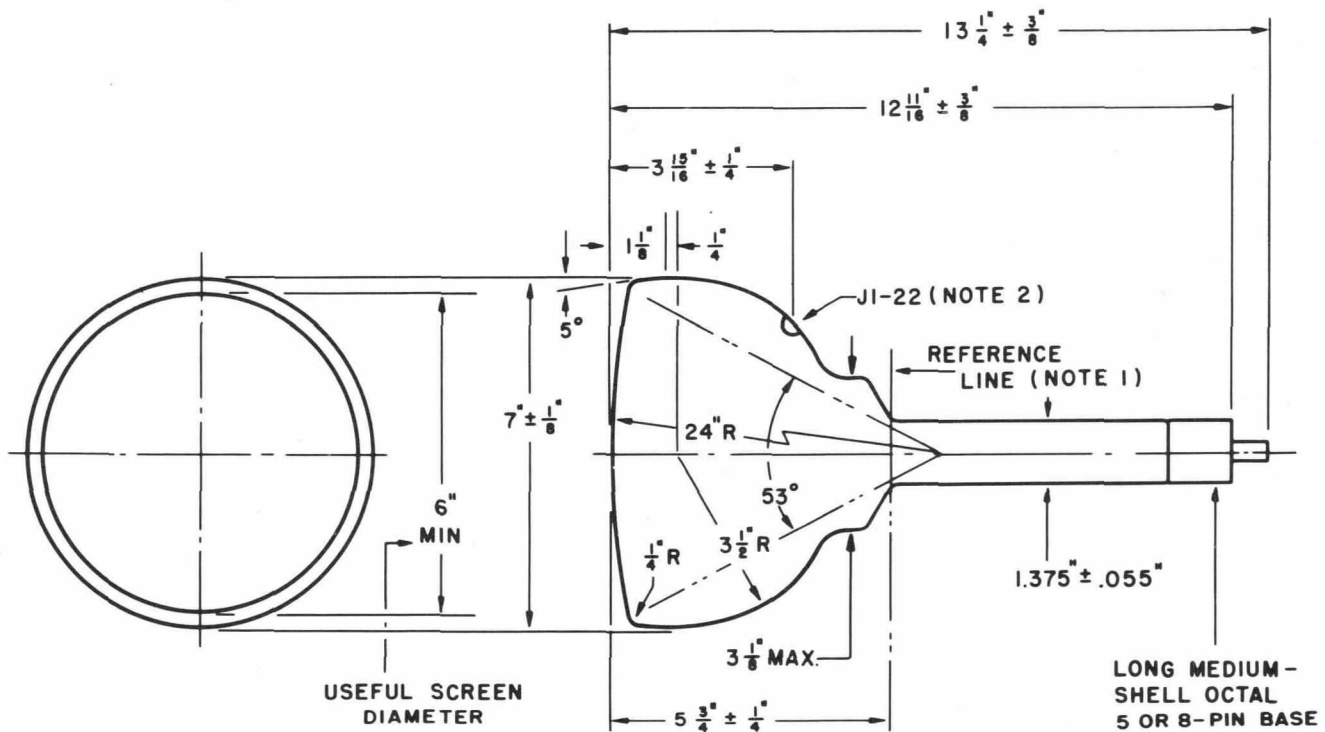


DIAGRAM NOTES:

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1. Reference line is determined by position where gauge $1.430 \begin{smallmatrix} +.003 \\ -.000 \end{smallmatrix}$ inch I.D. and 2 inches long will seat against the bulb cone.
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 degrees. Anode terminal is on same side of the tube as Pin No. 5