

## CHARACTERISTICS

### GENERAL DATA

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

\*In addition to the type shown, the 5BP-A can be supplied with several other screen phosphors.

### ELECTRICAL DATA

Heater Voltage . . . . .	6.3 Volts
Heater Current (approx.) . . . . .	0.6 Ampere
Direct Interelectrode Capacitances (approx.)	
Grid No. 1 to All Other Electrodes . . . . .	8.0 $\mu\mu\text{f}$
Between Deflecting Plates 1-2 <sup>1</sup> . . . . .	1.3 $\mu\mu\text{f}$
Between Deflecting Plates 3-4 <sup>1</sup> . . . . .	1.2 $\mu\mu\text{f}$
Deflecting Plate 1 to All Other Electrodes . . . . .	9.5 $\mu\mu\text{f}$
Deflecting Plate 3 to All Other Electrodes . . . . .	12 $\mu\mu\text{f}$
Deflecting Plate 1 <sup>2</sup> to All Other Electrodes Except D2 . . . . .	8.0 $\mu\mu\text{f}$
Deflecting Plate 2 <sup>2</sup> to all Other Electrodes Except D1 . . . . .	7.5 $\mu\mu\text{f}$
Deflecting Plate 3 <sup>2</sup> to All Other Electrodes Except D4 . . . . .	10 $\mu\mu\text{f}$
Deflecting Plate 4 <sup>2</sup> to All Other Electrodes Except D3 . . . . .	7.5 $\mu\mu\text{f}$

### MECHANICAL DATA

Minimum Useful Screen Diameter . . . . .	4 $\frac{1}{2}$ Inches
Bulb . . . . .	J42C or Equivalent
Base . . . . .	Medium Shell Magnal 11 Pin
Basing . . . . .	11N
Weight (approx.) . . . . .	2 Pounds
Mounting Position . . . . .	Any

## RATINGS

### MAXIMUM RATINGS (Absolute Maximum Values)

Anode No. 2 Voltage . . . . .	2,200 Volts	dc
Anode No. 1 Voltage . . . . .	1,100 Volts	dc
Grid Voltage		
Negative Bias Value . . . . .	125 Volts	dc
Positive Bias Value . . . . .	0 Volts	dc
Peak Voltage Between Anode No. 2 and Any Deflection Plate	550 Volts	

### TYPICAL OPERATING CONDITIONS

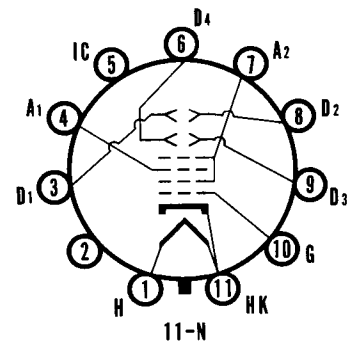
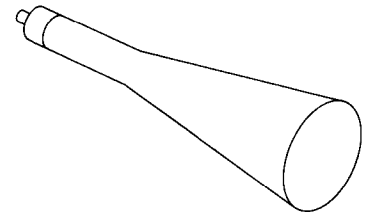
Anode No. 2 Voltage <sup>3</sup> . . . . .	2,000 Volts	dc
Anode No. 1 Voltage for Focus . . . . .	315 to 562 Volts	dc
Grid Voltage Required for Cutoff <sup>4</sup> . . . . .	-20 to -60 Volts	dc
Deflection Factors		
Deflecting Plates 1-2 <sup>5</sup> . . . . .	70 to 98 Volts	dc/Inch
Deflecting Plates 3-4 <sup>6</sup> . . . . .	63 to 89 Volts	dc/Inch

### CIRCUIT VALUES

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

## QUICK REFERENCE DATA

- Oscilloscope Tube
- 5" Direct Viewed
- Round Glass Type
- Electrostatic Deflection
- Electrostatic Focus



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**NOTES:**

1. Deflecting Plate 1 is Pin No. 3  
Deflecting Plate 2 is Pin No. 8  
Deflecting Plate 3 is Pin No. 9  
Deflecting Plate 4 is Pin No. 6
2. Trace produced by plates D3-D4 aligns with plane through tube axis and Pin No. 1, within 10°. Angle between D1-D2 trace and D3-D4 trace is 90° ± 3°. With D3 positive with respect to D4, the spot is deflected toward Pin No. 1. With D1 Positive with respect to D2, the spot is deflected toward Pin No. 4.
3. Brilliance and definition decrease with decreasing Anode No. 2 Voltage. In general, Anode No. 2 Voltage should not be less than 1500 volts.
4. Visual extinction of undeflected focused spot.
5. Deflecting Plates 1-2 are nearer the screen.
6. Deflecting Plates 3-4 are nearer the base.

**5BP1**

Sylvania Type 5BP1A supersedes Type 5BP1.

