

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 μmf
Between Deflecting Plates 1-2 ¹	1.3 μmf
Between Deflecting Plates 3-4 ¹	1.2 μmf
Deflecting Plate 1 to All Other Electrodes	9.5 μmf
Deflecting Plate 3 to All Other Electrodes	12 μmf
Deflecting Plate 1 ² to All Other Electrodes Except D2	8.0 μmf
Deflecting Plate 2 ² to All Other Electrodes Except D1	7.5 μmf
Deflecting Plate 3 ² to All Other Electrodes Except D4	10 μmf
Deflecting Plate 4 ² to All Other Electrodes Except D3	7.5 μmf

MECHANICAL DATA

Minimum Useful Screen Diameter	4 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

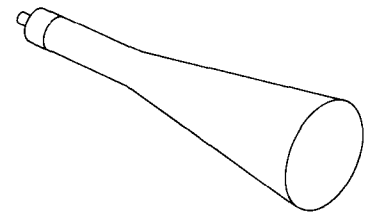
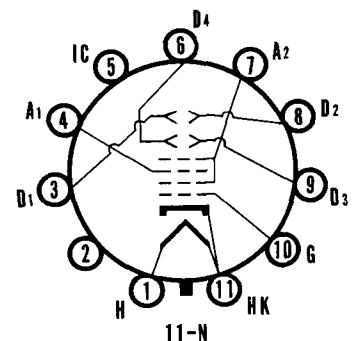
Anode No. 2 Voltage ³	2,000 Volts	dc
Anode No. 1 Voltage for Focus	315 to 562 Volts	dc
Grid Voltage Required for Cutoff ⁴	-20 to -60 Volts	dc
Deflection Factors		
Deflecting Plates 1-2 ⁵	70 to 98 Volts	dc/Inch
Deflecting Plates 3-4 ⁶	63 to 89 Volts	dc/Inch

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



SYLVANIA ELECTRIC
PRODUCTS INC.

TELEVISION PICTURE TUBE
DIVISION
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

SEPTEMBER, 1958

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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 $90^\circ \pm 3^\circ$. 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.

