

**CHARACTERISTICS**

**GENERAL DATA**

Focusing Method . . . . .	Electrostatic
Deflecting Method . . . . .	Electrostatic
Phosphor . . . . .	2BP1 2BP11
Fluorescence . . . . .	Green Blue
Phosphorescence . . . . .	— —
Persistence . . . . .	Medium Short
Faceplate . . . . .	Clear

\*In addition to the types shown, the 2BP- can be supplied with several other screen phosphors.

**ELECTRICAL DATA**

Heater Voltage . . . . .	6.3 Volts
Heater Current . . . . .	0.6 ± 10 % Ampere
Direct Interelectrode Capacitances	
Grid to All Other Electrodes . . . . .	8 μμf
Between Deflecting Plates 1-2 <sup>1</sup> . . . . .	2 μμf
Between Deflecting Plates 3-4 <sup>1</sup> . . . . .	2 μμf
Deflecting Plate 1 to All Other Electrodes . . . . .	9 μμf
Deflecting Plate 2 to All Other Electrodes . . . . .	7 μμf
Deflecting Plate 3 to All Other Electrodes . . . . .	7 μμf
Deflecting Plate 4 to All Other Electrodes . . . . .	7 μμf

**MECHANICAL DATA**

Minimum Useful Screen Diameter . . . . .	1 3/4 Inches
Overall Length . . . . .	7 5/8 ± 3/16 Inches
Bulb . . . . .	J16A
Base (Small Shell Duodecal 10-Pin or 12-Pin) . . . . .	B10-75 or B12-43
Basing . . . . .	12E
Weight (Approx.) . . . . .	1/4 Pound

With D1 positive with respect to D2, the spot is deflected toward Pin No. 4; with D3 positive with respect to D4, the spot is deflected toward Pin No. 1.

The plane through the tube axis and Pin No. 4 may vary from the trace produced by D1 and D2 by an angular tolerance (measured about the tube axis) of 10°

The angle between D1-D2 and D3-D4 traces is 90° ± 3°

**RATINGS**

**MAXIMUM RATINGS (Absolute Maximum Values)**

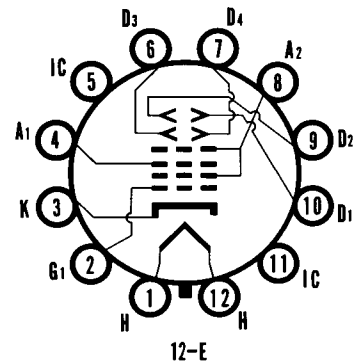
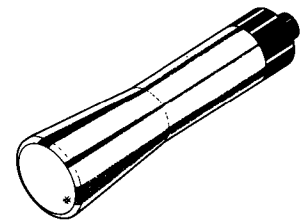
Anode No. 2 Voltage . . . . .	2750 Volts	dc
Anode No. 1 Voltage . . . . .	1100 Volts	dc
Grid Voltage		
Negative Bias Value . . . . .	220 Volts	
Positive Peak Value . . . . .	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode . . . . .	140 Volts	
Heater Positive with Respect to Cathode . . . . .	140 Volts	
Peak Voltage Between Anode No. 2 and Any Deflection Plate . . . . .	550 Volts	

**TYPICAL OPERATING CONDITIONS**

Anode No. 2 Voltage <sup>2</sup> . . . . .	1000	2000 Volts	dc
Anode No. 1 Voltage for Focus . . . . .	150-280	300-560 Volts	dc
Max. Grid Voltage Required for Cutoff <sup>3</sup> . . . . .	-67.5	-135 Volts	dc
Deflection Factors:			
Deflecting Plates 1-2 <sup>4</sup> . . . . .	115 to 155	230 to 310 Volts	dc/Inch
Deflecting Plates 3-4 <sup>5</sup> . . . . .	74 to 100	148 to 200 Volts	dc/Inch
Spot Position (Undeflected) <sup>6</sup> . . . . .		5 mm	

**QUICK REFERENCE DATA**

Oscilloscope Tube  
2" Direct Viewed  
Round Glass Type  
Electrostatic Deflection  
Electrostatic Focus



**SYLVANIA ELECTRONIC TUBES**

A Division of  
Sylvania Electric Products Inc.

**PICTURE TUBE OPERATIONS**  
**SENECA FALLS, NEW YORK**

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File Under

**SPECIAL AND GENERAL**  
**PURPOSE CATHODE RAY TUBES**

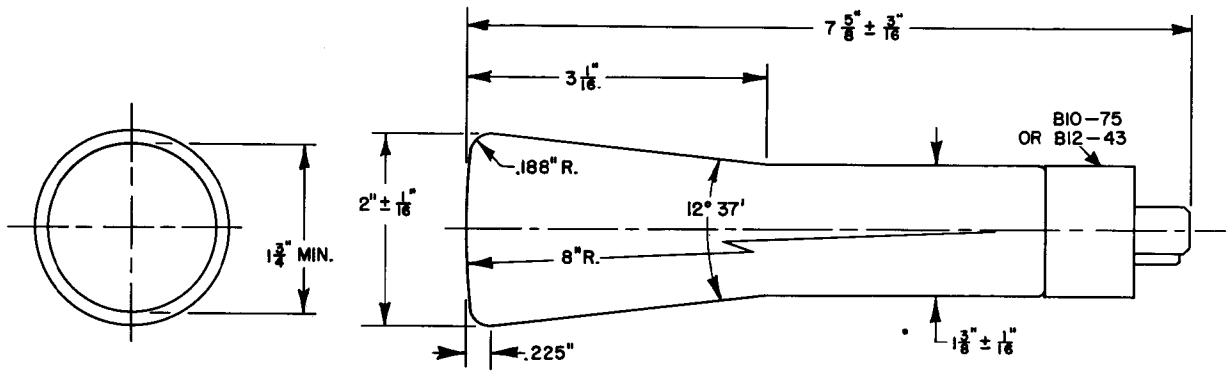
**CIRCUIT VALUES**

Grid Circuit Resistance . . . . .	1.5 Megohms Max.
Deflection Circuit Resistance . . . . .	5.0 Megohms Max.

**NOTES:**

1. Deflecting Plate 1 is Pin No. 10  
 Deflecting Plate 2 is Pin No. 9  
 Deflecting Plate 3 is Pin No. 6  
 Deflecting Plate 4 is Pin No. 7
2. Brilliance and definition decrease with decreasing Anode No. 2 Voltage. In general, Anode No. 2 Voltage should not be less than 500 volts.
3. Visual extinction of undeflected focused spot.
4. Deflecting Plates 1-2 are nearer the screen.
5. Deflecting Plates 3-4 are nearer the base.
6. The center of the undeflected, focused spot, will fall within a circle having a 5.0 mm radius concentric with the center of the tube face.

**OUTLINE**



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