



# engineering data service

SYLVANIA

5CP1A

5CP7A, 5CP11A

5CP12

## CHARACTERISTICS

### GENERAL DATA

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

### ELECTRICAL DATA

Heater Voltage . . . . .	6.3 Volts
Heater Current (approx.) . . . . .	0.6 Ampere
Direct Interelectrode Capacitances (approx.) . . . . .	
Cathode to All Other Electrodes . . . . .	9 $\mu\mu$ f
Grid No. 1 to All Other Electrodes . . . . .	8 $\mu\mu$ f
Between Deflecting Plates 1-2 <sup>1</sup> . . . . .	2 $\mu\mu$ f
Between Deflecting Plates 3-4 <sup>1</sup> . . . . .	2 $\mu\mu$ f
Deflecting Plate 1 <sup>1</sup> to All Other Electrodes . . . . .	9 $\mu\mu$ f
Deflecting Plate 2 <sup>1</sup> to All Other Electrodes . . . . .	9 $\mu\mu$ f
Deflecting Plate 3 <sup>1</sup> to All Other Electrodes . . . . .	7 $\mu\mu$ f
Deflecting Plate 4 <sup>1</sup> to All Other Electrodes . . . . .	8 $\mu\mu$ f

### MECHANICAL DATA

Minimum Useful Screen Dimension (Diameter) . . . . .	4½ Inches
Bulb Contact (Recessed Small Ball Cap) . . . . .	J1-22
Base (Medium Shell Diheptal 12-Pin) . . . . .	B12-37
Basing . . . . .	14J

### RATINGS

#### MAXIMUM RATINGS (Design Center Values)

Anode No. 3 Voltage . . . . .	4,000 Volts dc
Anode No. 2 Voltage . . . . .	2,000 Volts dc
Anode No. 1 Voltage . . . . .	1,000 Volts dc
Grid No. 1 Voltage . . . . .	
Negative Bias Value . . . . .	200 Volts dc
Positive Bias Value . . . . .	0 Volts dc
Positive Peak Value . . . . .	2 Volts
Peak Heater Cathode Voltage . . . . .	
Heater Negative with Respect to Cathode . . . . .	125 Volts
Heater Positive with Respect to Cathode . . . . .	125 Volts
Peak Voltage Between Anode No. 2 And Any Deflecting Plate . . . . .	500 Volts

#### RECOMMENDED OPERATING CONDITIONS

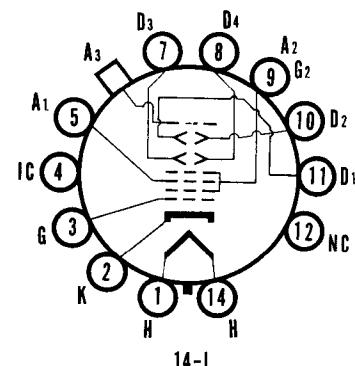
Anode No. 3 Voltage . . . . .	4,000 Volts dc
Anode No. 2 Voltage . . . . .	2,000 Volts dc
Anode No. 1 Voltage . . . . .	375 to 690 Volts dc
Grid No. 1 Voltage Required for Cutoff <sup>2</sup> . . . . .	-30 to -90 Volts dc
Deflection Factor . . . . .	
Deflecting Plates 1-2 <sup>3</sup> . . . . .	92 Volts dc/Inch
Deflecting Plates 3-4 <sup>4</sup> . . . . .	78 Volts dc/Inch

#### CIRCUIT VALUES

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

## QUICK REFERENCE DATA

Special Purpose Tube  
 5" Direct Viewed  
 Round Glass Type  
 Electrostatic Deflection  
 Electrostatic Focus  
 Post Deflection Accelerator



SYLVANIA ELECTRIC  
 PRODUCTS INC.

TELEVISION PICTURE TUBE  
 DIVISION  
 SENECA FALLS, NEW YORK

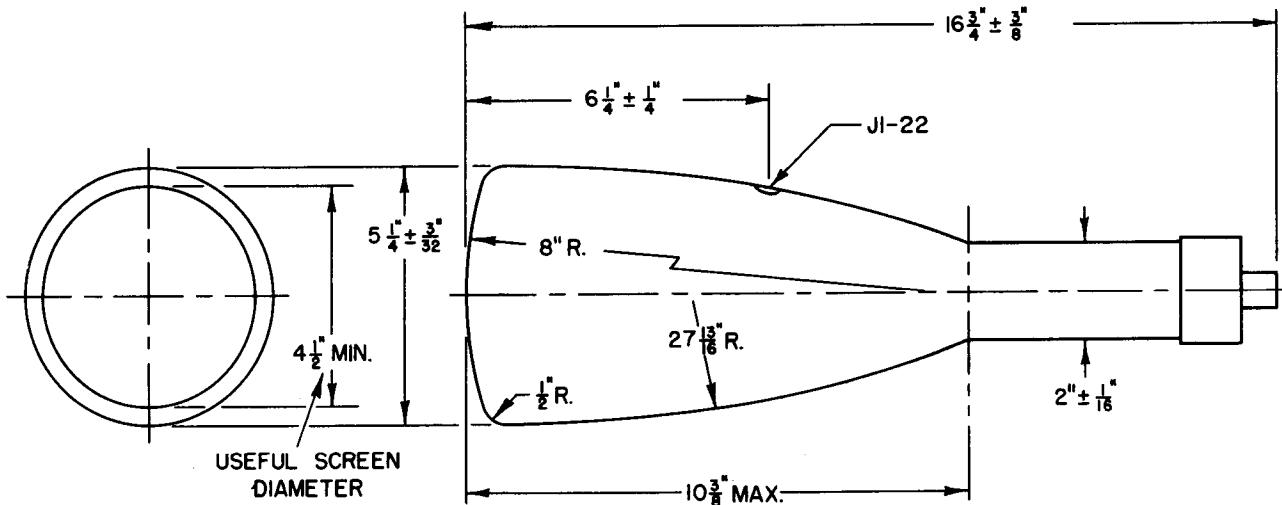
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**SYLVANIA**  
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**5CP12**

**NOTES:**

1. Deflecting Plate 1 is Pin No. 11  
 Deflecting Plate 2 is Pin No. 10  
 Deflecting Plate 3 is Pin No. 7  
 Deflecting Plate 4 is Pin No. 8
2. Visual extinction of undeflected focused spot.
3. Deflecting Plates 1-2 are nearer the screen.
4. Deflecting Plates 3-4 are nearer the base.
5. The plane through the tube axis and each of the following items may vary from the trace produced by deflecting plates 1-2 by the following angular tolerances measured about the tube axis: Pin 5 10 degrees; cap (on same side of tube as Pin 5) 10 degrees.



553005

**5CP7A**

The Sylvania Type 5CP7A is identical to the Type 5CP1A except it has a blue-white fluorescence, yellow phosphorescence, long persistence phosphor.

**5CP11A**

The Sylvania Type 5CP11A is identical to the Type 5CP1A except it has blue phosphor and a short persistence.

**5CP12**

The Sylvania Type 5CP12 is identical to the Type 5CP1A except it has an orange phosphor and a medium long persistence.