

## CHARACTERISTICS

### GENERAL DATA

Focusing Method . . . . . Electrostatic  
Deflecting Method . . . . . Electrostatic

Types*	Fluorescence	Phosphorescence	Persistence
8CP1 . . . . .	Green	—	Medium
8CP2 . . . . .	Blue-Green	Green	Long
8CP4 . . . . .	White	—	Medium
8CP5 . . . . .	Blue	—	Veryshort
8CP7 . . . . .	Blue	Yellow	Long
8CP11 . . . . .	Blue	—	Short

*\*In addition to the types shown, the 8CP- can be supplied with several other screen phosphors.*

### ELECTRICAL DATA

Heater Voltage . . . . . 6.3 Volts  
Heater Current . . . . .  $0.6 \pm 10\%$  Amperes

#### Direct Interelectrode Capacitances (Approx.)

Cathode to All Other Electrodes . . . . .	10 $\mu\text{f}$
Grid No. 1 to All Other Electrodes . . . . .	8 $\mu\text{f}$
Between Deflecting Plates 1-2 <sup>1</sup> . . . . .	4 $\mu\text{f}$
Between Deflecting Plates 3-4 <sup>1</sup> . . . . .	2 $\mu\text{f}$
Deflecting Plate 1 to All Other Electrodes Except DP2 . . . . .	8 $\mu\text{f}$
Deflecting Plate 2 to All Other Electrodes Except DP1 . . . . .	8 $\mu\text{f}$
Deflecting Plate 3 to All Other Electrodes Except DP4 . . . . .	6 $\mu\text{f}$
Deflecting Plate 4 to All Other Electrodes Except DP3 . . . . .	6 $\mu\text{f}$

### MECHANICAL DATA

Minimum Useful Screen Diameter . . . . .  $7\frac{1}{2}$  Inches  
Bulb Contact (Recessed Small Ball) . . . . . J1-22  
Base (Medium Shell Diheptal 12-Pin) . . . . . B12-37  
Basing . . . . . 14J  
Base alignment D1-D2 trace aligns with Pin No. 5  
and No. 12 . . . . .  $\pm 10$  Degrees  
Positive voltage on D1 deflects beam toward Pin No. 5  
Positive voltage on D3 deflects beam toward Pin No. 2

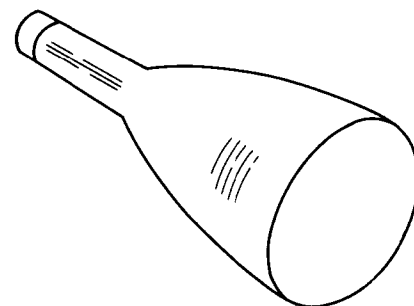
## RATINGS

### MAXIMUM RATINGS (Absolute Maximum Values)

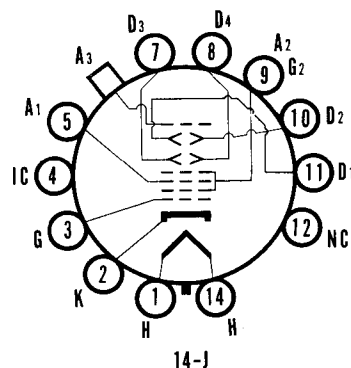
Anode No. 3 Voltage . . . . .	6,600 Volts	dc
Anode No. 2 Voltage . . . . .	6,600 Volts	dc
Ratio of Anode No. 3 Voltage to Anode No. 2 Voltage . . . . .	2.3:1 Volts	dc
Anode No. 1 Voltage . . . . .	2,750 Volts	dc
Grid No. 1 Voltage . . . . .		
Negative Bias Value . . . . .	220 Volts	dc
Positive Bias Value . . . . .	0	
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 Deflecting Plate . . . . .	550 Volts	

## QUICK REFERENCE DATA

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



153006



**SYLVANIA**  
**ELECTRONIC TUBES**  
A Division of  
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**PICTURE TUBE OPERATIONS**  
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**TYPICAL OPERATING CONDITIONS**

Anode No. 3 Voltage . . . . .	4,000 Volts dc
Anode No. 2 Voltage . . . . .	2,000 Volts dc
Anode No. 1 Voltage . . . . .	540 to 800 Volts dc
Grid No. 1 Voltage Required for Cutoff <sup>2</sup> . . . . .	-24 to -56 Volts dc
Deflection Factor	
Deflecting Plates 1-2 . . . . .	58 to 81 Volts dc/Inch
Deflecting Plates 3-4 . . . . .	49 to 68 Volts dc/Inch

**CIRCUIT VALUES**

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

**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 spot.

**WARNING:**

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

