

## CHARACTERISTICS

### GENERAL DATA

Focusing Method . . . . .	Electrostatic
Deflecting Method . . . . .	Magnetic
Deflection Angle (Approx.) . . . . .	70 Degrees
	<b>7AUP4</b> <b>7AUP7</b>
Phosphor* . . . . .	Aluminized P4              Aluminized P7
Fluorescence . . . . .	White                      White
Persistence . . . . .	Short to Medium              Long
Phosphorescence . . . . .	—                              Yellow-Green
Faceplate . . . . .	Spherical, Clear Glass

\*In addition to the types shown, the 7AUP- can be supplied with several other screen phosphors.

### ELECTRICAL DATA

Heater Voltage . . . . .	6.3 Volts
Heater Current . . . . .	0.3 ± 5% Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes . . . . .	7.0 μμf
Grid No. 1 to All Other Electrodes . . . . .	9.0 μμf
Grid No. 2 to All Other Electrodes . . . . .	7.0 μμf

### MECHANICAL DATA

Minimum Useful Screen Diameter . . . . .	6 Inches
Bulb . . . . .	LEA 480 or Equivalent
Bulb Contact (Recessed Small Ball Cap) . . . . .	J1-22
Base <sup>1</sup> . . . . .	E9-37
Basing . . . . .	9HT
Weight (Approx.) . . . . .	2¼ Pounds

## RATINGS

### MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage . . . . .	11,000 Volts	dc
Grid No. 4 Voltage (Focusing Electrode) . . . . .	1100 Volts	dc
Grid No. 2 Voltage . . . . .	770 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value . . . . .	155 Volts	dc
Positive Bias Value . . . . .	0 Volts	dc
Positive Peak Value . . . . .	0 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
During Warm-up Period		
not to Exceed 15 Seconds . . . . .	450 Volts	
After Warm-up Period . . . . .	200 Volts	
Heater Positive with Respect to Cathode . . . . .	200 Volts	

### TYPICAL OPERATING CONDITIONS

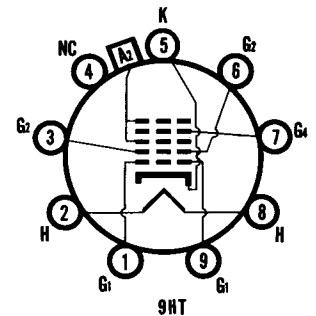
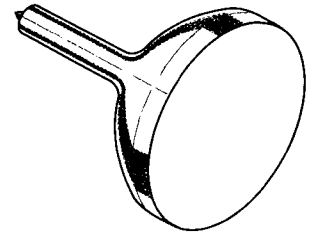
Anode Voltage . . . . .	8000 Volts	dc Max.
Grid No. 4 Voltage for Focus <sup>2</sup> . . . . .	0 to 300 Volts	dc
Grid No. 2 Voltage . . . . .	300 Volts	dc
Grid No. 1 Voltage		
Required for Spot Cutoff . . . . .	-25 to -60 Volts	dc
Line Width <sup>3</sup> . . . . .	0.012 Inch	

### CIRCUIT VALUES

Grid No. 1 Circuit Resistance . . . . .	1.5 Megohms	Max.
Grid No. 2 Circuit Resistance <sup>4</sup> . . . . .	10,000 Ohms	Max.
Grid No. 4 Circuit Resistance <sup>4</sup> . . . . .	10,000 Ohms	Max.

## QUICK REFERENCE DATA

Monitor Tube (7AUP4)  
 Radar Indicator (7AUP7)  
 7" Direct Viewed  
 Round Glass Type  
 Spherical Faceplate  
 Clear Glass  
 Aluminized Screen  
 Magnetic Deflection  
 Electrostatic Focus  
 7/8 Inch Neck Diameter  
 Short Length



## 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

NOTES:

1. A socket with a center opening to clear the tubulation should be used. Care should be exercised to avoid danger to the tubulation.
2. With combined Grid No. 1 Bias Voltage and Video-Signal Voltage adjusted to give an anode current of  $50 \mu\text{a}$  on a  $6'' \times 6''$  raster.
3. With an anode current of  $50 \mu\text{a}$ , typical line width at center of faceplate, using half amplitude points of light energy distribution of a single line is 0.012 inch.
4. Protective resistance in the Grid No. 2 and Grid No. 4 circuits is advisable to prevent damage to the tube.

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.

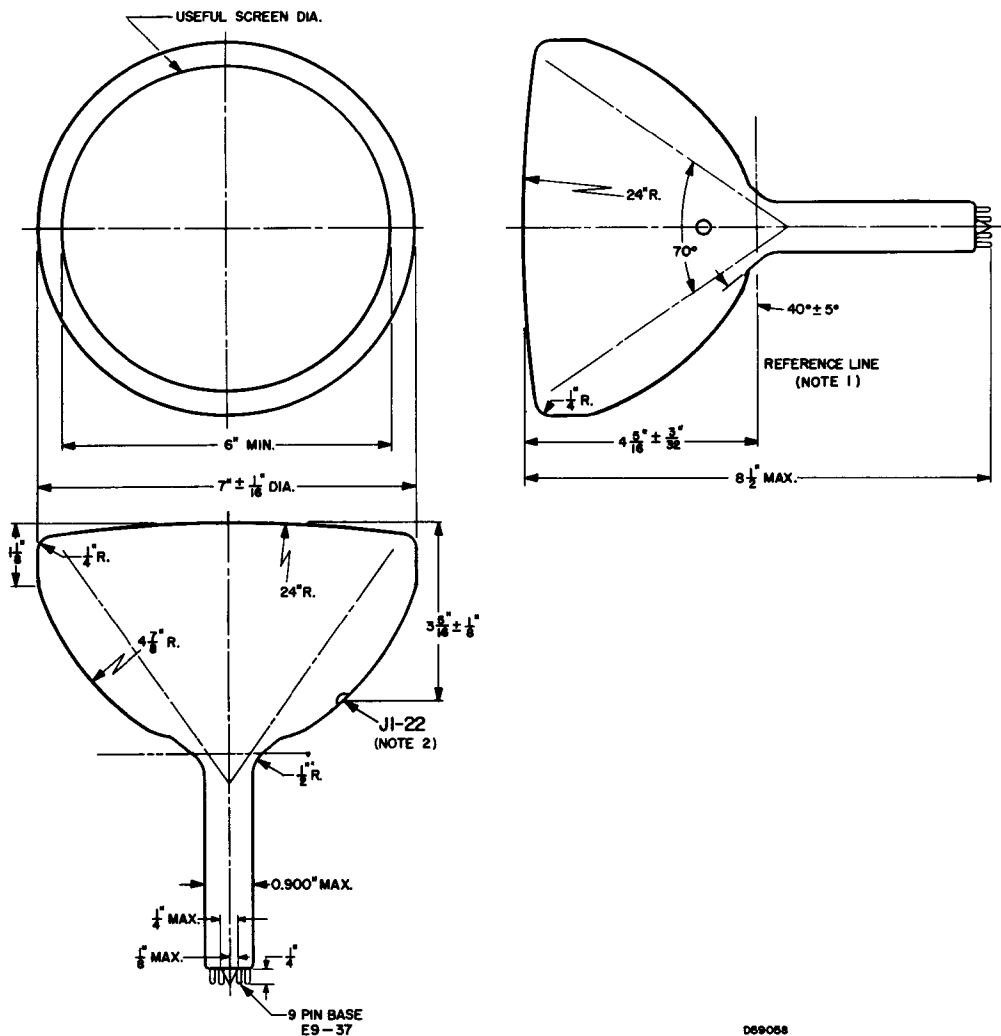


DIAGRAM NOTES:

1. Reference Line is determined by the point where the leading edge of a 1.640 inch inside diameter ring gauge will stop.
2. Anode contact (J1-22) aligns with space between Pins #1 and #9.