

**CHARACTERISTICS**

**GENERAL DATA**

Focusing Method . . . . .		Magnetic
Deflection Method . . . . .		Magnetic
Deflection Angle (Approx.) . . . . .		50 Degrees
Types*	<b>7MP7</b>	<b>7MP14</b>
Fluorescence . . . . .	Blue	Purple
Phosphorescence . . . . .	Yellow	Orange
Persistence . . . . .	Long	Medium-Long
Faceplate		Clear

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

**ELECTRICAL DATA**

Heater Voltage . . . . .	6.3 Volts
Heater Current . . . . .	0.6 ± 10% Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes . . . . .	5 μμf
Grid No. 1 to All Other Electrodes . . . . .	6 μμf

**MECHANICAL DATA**

Minimum Useful Screen Diameter . . . . .	6 Inches
Bulb . . . . .	J57½C or J57½D
Bulb Contact (Recessed Small Cavity Cap) . . . . .	J1-21
Base (Small Shell Duodecal 5-Pin) . . . . .	B5-57
Basing . . . . .	12D
Weight (Approx.) . . . . .	3½ Pounds

**RATINGS**

**MAXIMUM RATINGS (Absolute Maximum Values)**

Anode Voltage . . . . .	8,800 Volts	dc
Grid No. 2 Voltage . . . . .	770 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value . . . . .	200 Volts	dc
Positive Bias Value <sup>1</sup> . . . . .	0 Volts	dc
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	

**TYPICAL OPERATING CONDITIONS**

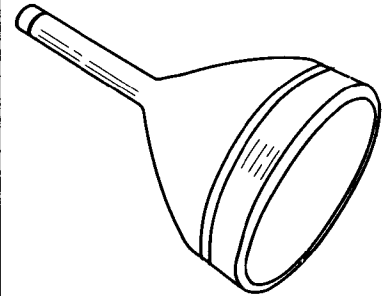
Anode Voltage <sup>2</sup> . . . . .	4000	7000 Volts	dc
Grid No. 2 Voltage . . . . .	250	250 Volts	dc
Grid No. 1 Voltage for Cutoff <sup>3</sup> . . . . .	-27 to -63	-27 to -63 Volts	dc
Focusing Coil Current <sup>4</sup> . . . . .	64 ± 15%	85 ± 15% Ma	
Spot Position . . . . .		See Note 5	

**CIRCUIT VALUES**

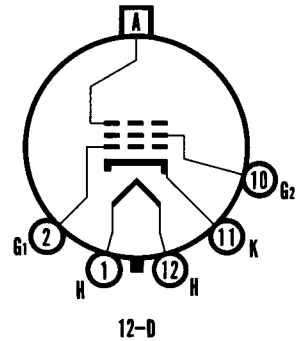
Grid No. 1 Circuit Resistance . . . . .	1.5 Megohms Max.
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**QUICK REFERENCE DATA**

- Radar Indicator
- 7" Direct Viewed
- Round Glass Type
- Magnetic Focus
- Magnetic Deflection



153003



**SYLVANIA ELECTRONIC TUBES**

A Division of  
**SYLVANIA ELECTRIC PRODUCTS, Inc.**

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

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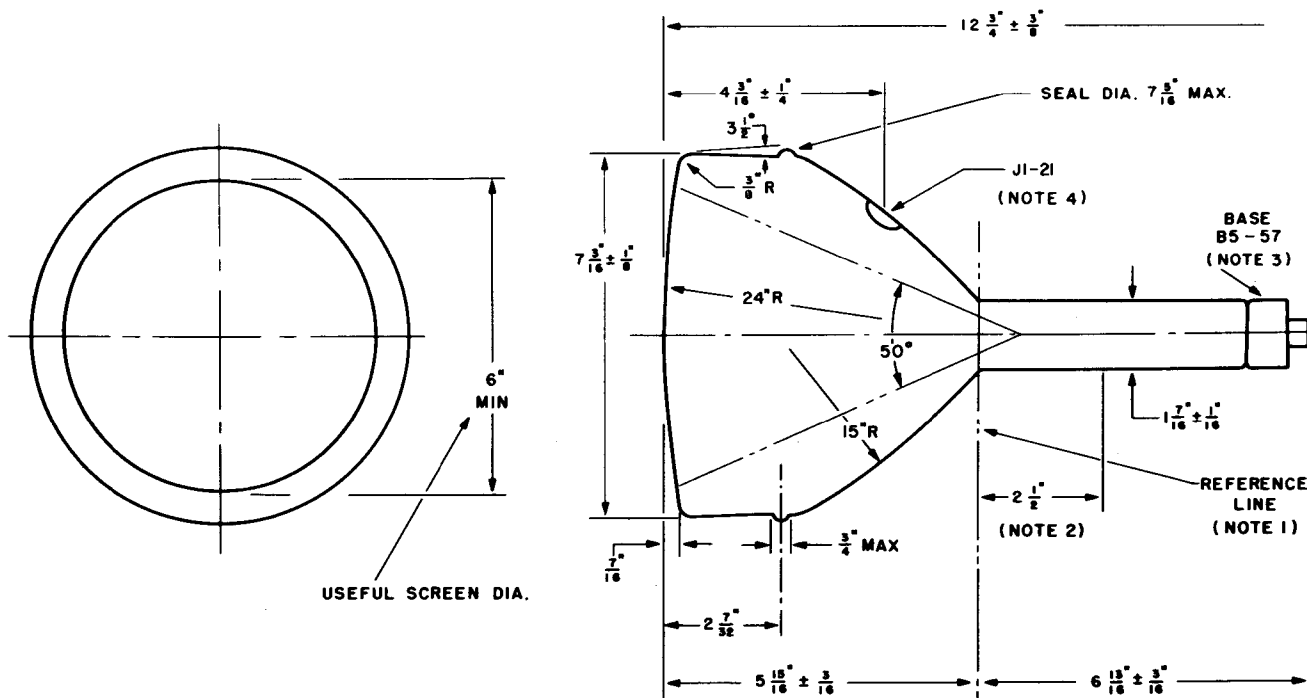
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**NOTES:**

1. At or near this rating, the effective resistance of the anode supply should be adequate to limit the anode input power to 6 watts.
2. Brilliance and definition decrease with decreasing anode voltage. In general, anode voltage should not be less than 4,000 volts.
3. Visual extinction of undeflected focused spot.
4. For JETEC Focusing Coil No. 109 positioned with air gap toward faceplate and center line of air gap  $2\frac{3}{4}$  inches from reference line (See Outline Drawing) and anode current of 200 microamperes.
5. The center of the undeflected unfocused spot will fall within a circle having a 12 mm radius concentric with the center of the tube face.

**WARNING:**

X-ray radiation shielding may be necessary to protect against 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 position where reference line gauge (JETEC No. 112) 1.500 inches  $\begin{matrix} +.003 \\ -.000 \end{matrix}$  inches I.D. and 2 inches long will seat on bulb cone.
2. Location of deflection yoke must be within this space.
3. Socket for this base should not be rigidly mounted: It should have flexible leads and be allowed to move freely. Bottom circumference of base shell will fall within circle concentric with bulb axis and having diameter of  $1\frac{7}{8}$  inches.
4. The plane through the tube axis and vacant pin position No. 3 may vary from the plane through the tube axis and bulb terminal by an angular tolerance (measured about the tube axis) of  $\pm 10$  Degrees. Bulb terminal is on the same side as vacant pin position No. 3.