

CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflection Method	Magnetic
Deflection Angle (Approx.)	50 Degrees
Types*	7MP7 7MP14
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 Value¹	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

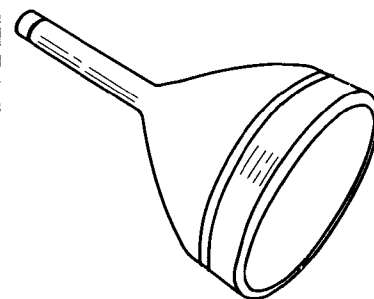
Anode Voltage²	4000	7000 Volts	dc
Grid No. 2 Voltage	250	250 Volts	dc
Grid No. 1 Voltage for Cutoff³	-27 to -63	-27 to -63 Volts	dc
Focusing Coil Current⁴	64 ± 15%	85 ± 15% Ma	
Spot Position		See Note 5	

CIRCUIT VALUES

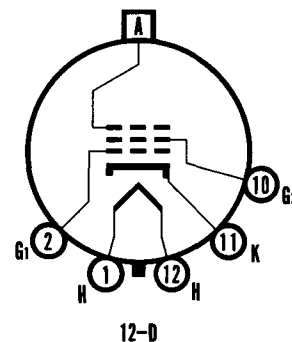
Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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QUICK REFERENCE DATA

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

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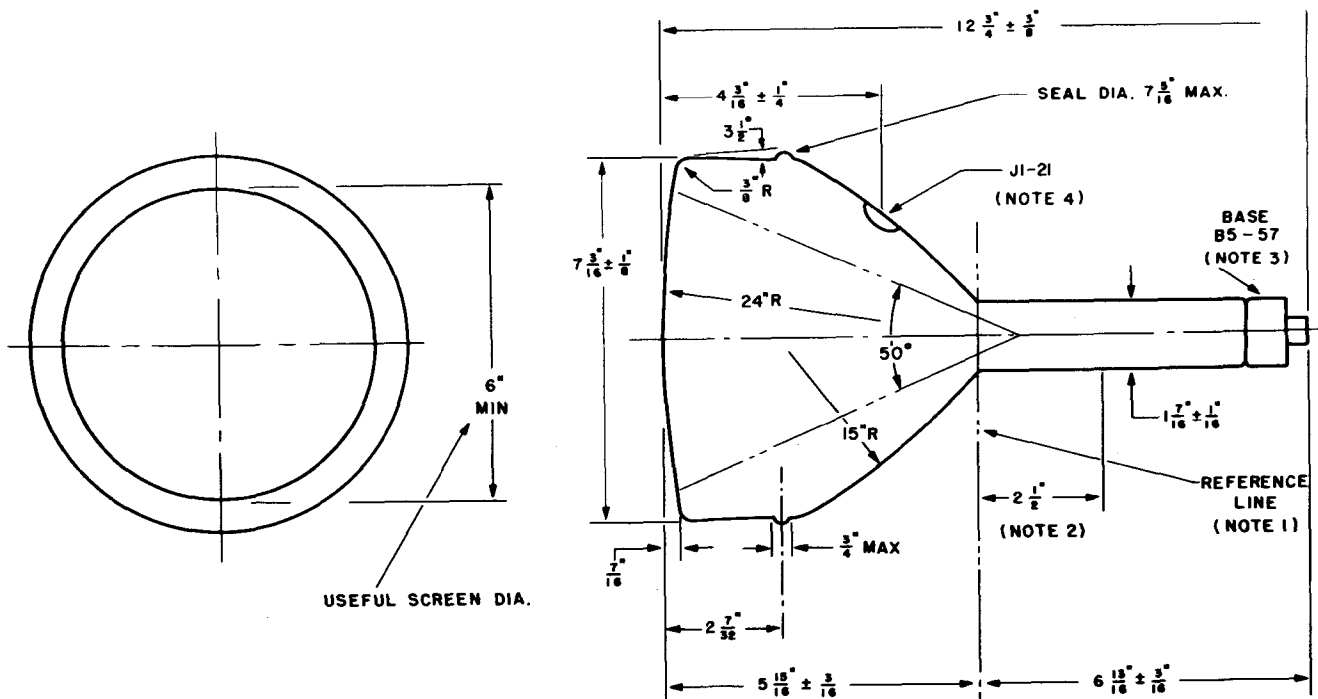
DECEMBER 1958

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, which ever is less.



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DIAGRAM NOTES:

1. Reference line is determined by position where reference line gauge (JETEC No. 112) 1.500 inches $\begin{smallmatrix} + .003 \\ - .000 \end{smallmatrix}$ 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 ± 10 Degrees. Bulb terminal is on the same side as vacant pin position No. 3.