

CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflecting Method	Magnetic
Deflecting Angle (approx.)	54 Degrees
Phosphor	P4
Fluorescence	White
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	5 $\mu\mu\text{f}$
Grid No. 1 to All Other Electrodes	6 $\mu\mu\text{f}$
External Conductive Coating to Anode ¹	3000 $\mu\mu\text{f}$ Max. 750 $\mu\mu\text{f}$ Min.
Ion Trap Magnet	External, Double Field Type

MECHANICAL DATA

Minimum Useful Screen Dimensions (Diameter)	11 Inches
Bulb Contact Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 5-Pin)	B5-57
Basing	12N
Bulb Contact Aligns with Vacant Pin	
Position No. 3	± 10 Degrees

RATINGS

MAXIMUM RATINGS (Design Center Values)

Anode Voltage	12,000 Volts dc
Grid No. 2 Voltage	410 Volts dc
Grid No. 1 Voltage	
Negative Bias Value	125 Volts dc
Positive Bias Value	0 Volts dc
Positive Peak Value	2 Volts
Heater Negative with Respect to Cathode	
During Warm-up Period Not to	
Exceed 15 Seconds	410 Volts dc
After Equipment Warm-up Period	140 Volts dc
Heater Positive with Respect to Cathode	140 Volts dc

RECOMMENDED OPERATING CONDITIONS

Anode Voltage	11,000 Volts dc
Grid No. 2 Voltage	250 Volts dc
Grid No. 1 Voltage Required for	
Cutoff ²	-27 to -63 Volts dc
Focusing Coil Current (approx.) ³	110 Ma dc
Ion Trap Magnet Strength (approx.)	35 Gauss

CIRCUIT VALUES

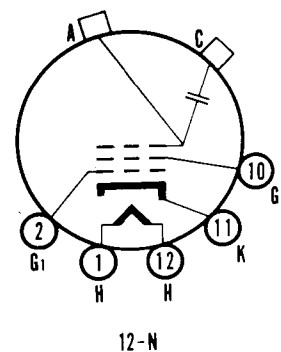
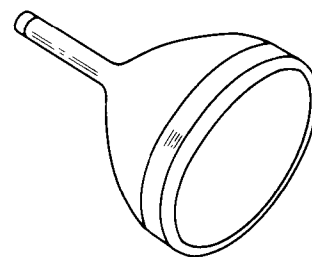
Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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NOTES:

1. External conductive coating must be grounded.
2. Visual extinction of undeflected focused spot.
3. For RTMA focusing coil 106 or equivalent three and one quarter inches from reference line, bias adjusted to 20 foot lamberts on a 7½ x 10 inch picture area sharply focused at center of screen.

QUICK REFERENCE DATA

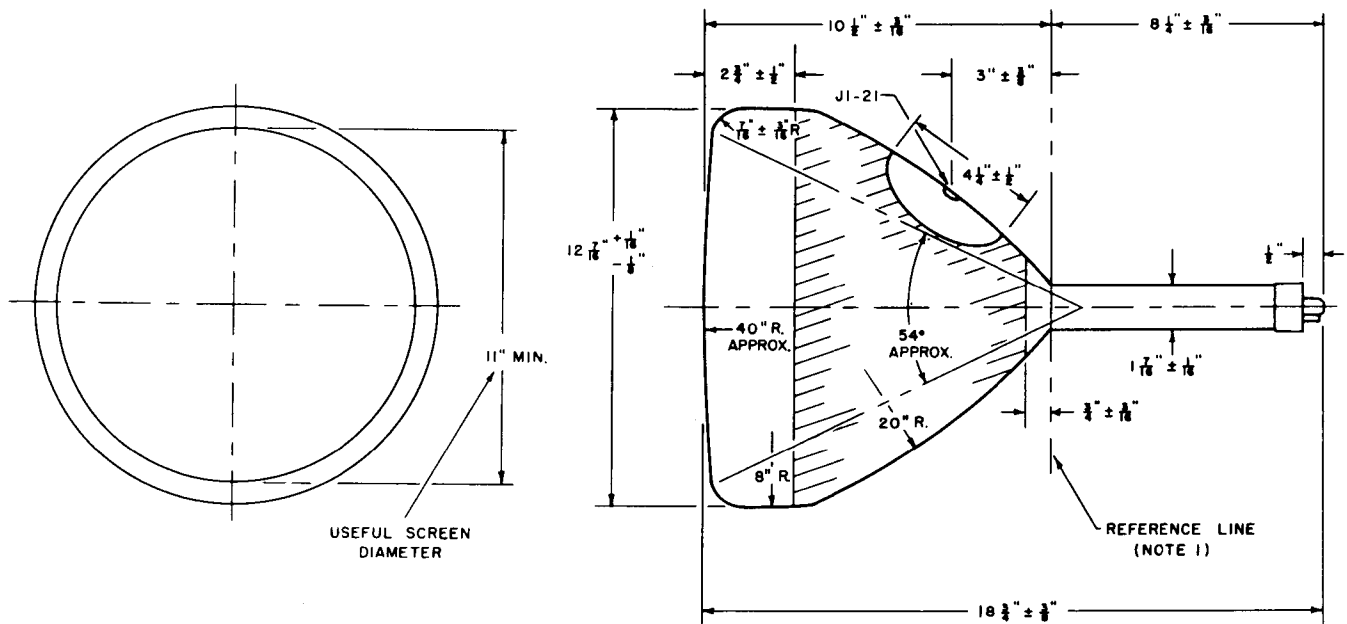
Television Picture Tube
12" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus
Double Field Ion Trap
External Conductive Coating
(12LP4A has gray filter glass faceplate)



SYLVANIA ELECTRIC
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DIAGRAM NOTES:

1. Reference line is determined by the plane of the upper edge of the reference line gauge (RTMA No. 112) when the gauge is resting on the glass cone.

12LP4A

The Sylvania Type 12LP4A is identical to Type 12LP4 except for having the gray filter glass faceplate.

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.