

CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflection Method	Magnetic
Deflection Angle (Approx.)	54 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Transmittance (Approx.)	74 Percent

*In addition to the types shown, the 12KP-A 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
External Conductive Coating to Anode ¹	2500 μμf Max. 500 μμf Min.

MECHANICAL DATA

Minimum Useful Screen Diameter	11 1/4 Inches
Bulb	J99 1/2 A or J99 1/2 B
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 5-Pin)	B5-57
Basing	12N
Weight (Approx.)	12 1/2 Pounds

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	13,200 Volts	dc
Grid No. 2 Voltage	450 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	140 Volts	dc
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
During Warm-up Period Not to Exceed 15 Seconds	450 Volts	
After Equipment Warm-up Period	154 Volts	
Heater Positive with Respect to Cathode	154 Volts	

TYPICAL OPERATING CONDITIONS

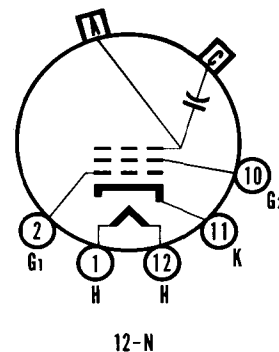
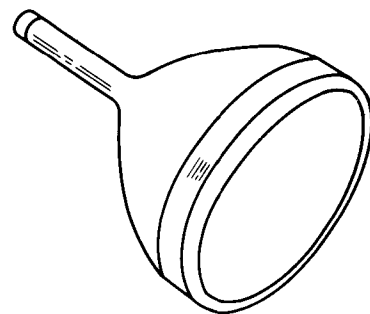
Anode Voltage ²	12,000 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ³	-33 to -77 Volts	dc
Focusing Coil Current (Approx.) ⁴	135 Ma	dc
Spot Position	See Note 5	

CIRCUIT VALUES

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

Video Monitor Tube
12" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus
External Conductive Coating
Gray Filter Glass Faceplate
Aluminized Screen



SYLVANIA ELECTRONIC TUBES

A Division of
SYLVANIA ELECTRIC PRODUCTS, Inc.

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1. External conductive coating must be grounded.
2. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 9,000 volts.
3. Visual extinction of undeflected focused spot.
4. For JETEC Focusing Coil No. 106 positioned with center line of air gap $3\frac{1}{4}$ inches from reference line (See Outline Drawing). The indicated current is for condition with combined Grid No. 1 bias voltage and video signal voltage adjusted to produce a highlight brightness of 35 foot-lamberts on a $10\frac{1}{2}$ " x $7\frac{3}{4}$ " picture area, and sharply focused at the center of the screen.
5. The center of the undeflected, unfocused spot will fall within a circle having 20 mm radius concentric with the center of the tube face.

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.

1. Reference line is determined by plane of upper edge of JETEC No. 112 reference line gauge, when the gauge is seated against the bulb.
2. Vacant pin position No. 3 aligns with anode contact cap (J1-21) within 30 degrees.