

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (approx.)	
Horizontal	85 Degrees
Diagonal	90 Degrees
Phosphor	
17ATP4/17AVP4	P4
17ATP4A/17AVP4A	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (approx.)	71 Percent

ELECTRICAL DATA

Heater Voltage	6.3 Volts	
Heater Current	0.6 ± 5% Ampere	
Heater Warm-up Time ¹	11 Seconds	
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	1500 μμf	Max.
	1200 μμf	Min.
Ion Trap Magnet	External, Single Field Type	

MECHANICAL DATA

Minimum Useful Screen Dimensions	14 ⁵ / ₁₆ x 11 ¹ / ₈ Inches
Minimum Useful Screen Area (approx.)	149 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 6-Pin)	B6-63
Basing	12L
Weight (approx.)	13 ¹ / ₂ Pounds

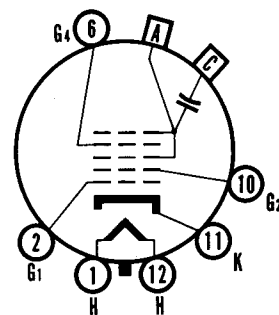
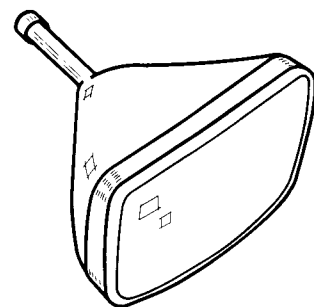
RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	17,600 Volts	dc
Grid No. 4 Voltage		
(Focusing Electrode)	-550 to +1100 Volts	dc
Grid No. 2 Voltage	550 Volts	
Grid No. 1 Voltage		
Negative Bias Value	140 Volts	dc
Negative Peak Value	220 Volts	
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	200 Volts	
Heater Positive with Respect to Cathode	200 Volts	

QUICK REFERENCE DATA

Television Picture Tube
 17" Direct Viewed
 Rectangular Glass Type
 Spherical Faceplate
 Gray Filter Glass
 Magnetic Deflection
 Electrostatic Focus
 Single Field Ion Trap
 External Conductive Coating
 17ATP4A/17AVP4A has
 Aluminized Screen



12-L

**SYLVANIA ELECTRIC
 PRODUCTS INC.**

**TELEVISION PICTURE TUBE
 DIVISION**

SENECA FALLS, NEW YORK

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17ATP4/17AVP4
17ATP4A/17AVP4A

TYPICAL OPERATING CONDITIONS

Anode Voltage	14,000 Volts	dc
Grid No. 4 Voltage	-56 to +310 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ³	-28 to -72 Volts	dc
Ion Trap Magnet Current (Average) ⁴	28 Ma	dc
Field Strength of PM Ion Trap Magnet ⁵	31 Gauss	Min.

CIRCUIT VALUES

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

1. *Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with E = 25 volts and series R = 31.5 ohms.*
2. *External Conductive Coating must be grounded.*
3. *Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.*
4. *For JETEC Ion Trap Magnet No. 117, with pole pieces centered over Grid No. 2 on mount, and rotated for maximum brightness.*
5. *For Typical PM Ion Trap Magnet with field strength tolerance of ± 3 gauss.*

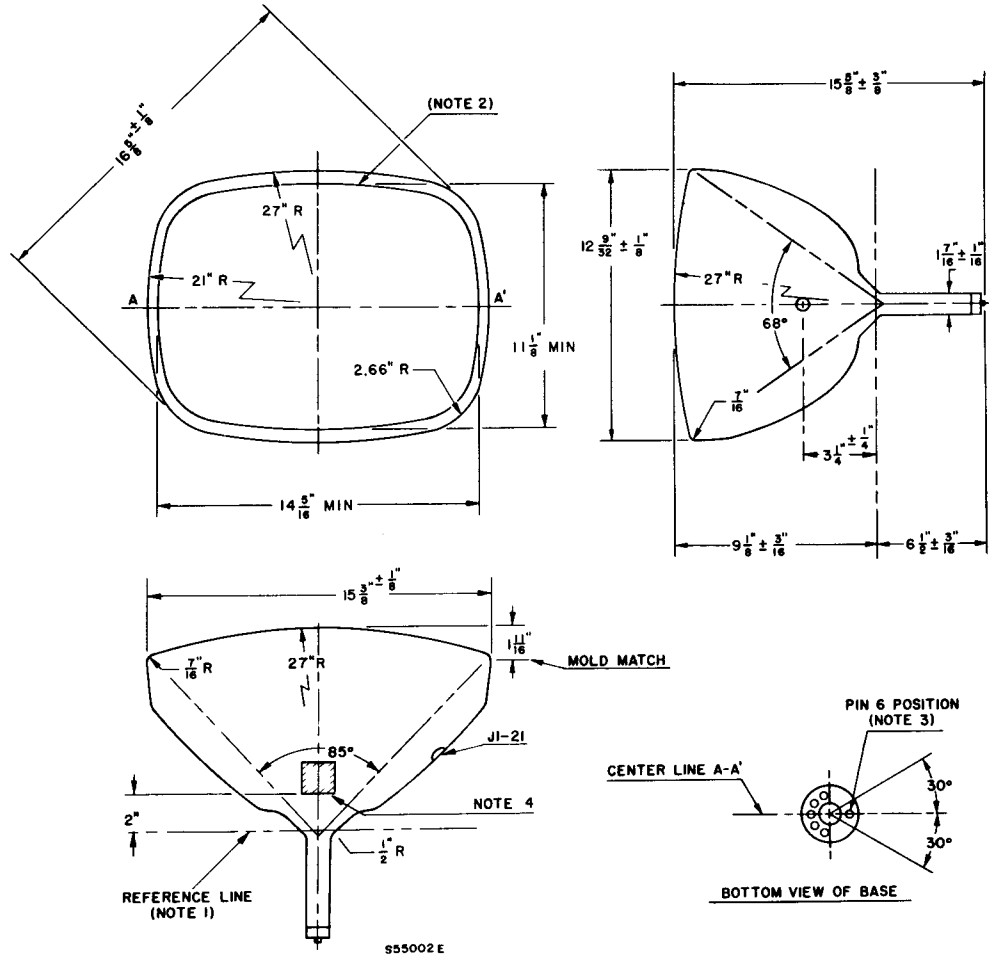


DIAGRAM NOTES:

1. Reference line is determined by the plane C-C' of the reference line gauge (JETEC No. 116) when the gauge is resting on the glass cone. The neck diameter near the cone may exceed 1.500" but is limited by the internal contour of the yoke reference line gauge.
2. Useful screen area.
3. Anode contact aligns with pin No. 6 ± 30 degrees.

17ATP4A/17AVP4A

The Sylvania Type 17ATP4A/17AVP4A is identical to the Type 17ATP4/17AVP4 except it has an aluminized screen.

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.