

CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflection Method	Magnetic
Deflection Angles (approx.)	
Vertical	68 Degrees
Horizontal	85 Degrees
Diagonal	90 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (approx.)	80 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 μmf
Grid No. 1 to All Other Electrodes	6 μmf
Ion Trap Magnet	External, Single Field Type

MECHANICAL DATA

Minimum Useful Screen Dimensions	.7-3/16 x 5-3/8 Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 5-Pin)	B5-57
Basing	12D
Weight (approx.)	2 1/4 Pounds

RATINGS

MAXIMUM RATINGS (Absolute-Maximum Values)

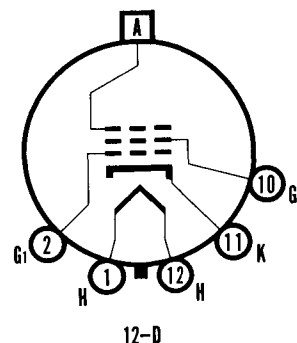
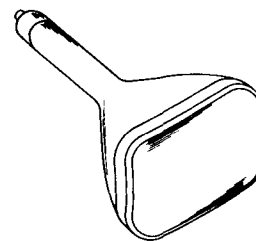
Anode Voltage	19,800 Volts	dc
Grid No. 2 Voltage	550 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	155 Volts	dc
Negative Peak Value	220 Volts	
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
During Warm-up Period not to Exceed 15 Seconds	450 Volts	
After Equipment Warm-up period	200 Volts	
Heater Positive with Respect to Cathode	200 Volts	

TYPICAL OPERATING CONDITIONS

Anode Voltage	16,000 Volts	dc
Grid No. 2 (and Grid No. 4) Voltage	300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ²	-35 to -72 Volts	dc
Focusing Coil Current ³	125 ± 15% Ma	dc
Ion Trap Magnet Current (Average) ⁴	30 Ma	dc
Field Strength of PM Ion Trap Magnet ⁵	33 Gaussess Min.	

QUICK REFERENCE DATA

Monitor Tube
8" Rectangular, All Glass
Magnetic Focusing
Ion Trap
90° Magnetic Deflection
Gray Filter Glass
Aluminized Screen



SYLVANIA ELECTRIC
PRODUCTS INC.

TELEVISION PICTURE TUBE
DIVISION
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

JULY, 1958

PAGE 1 OF 3

CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms Max.

NOTES:

- 1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
- 2. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.
- 3. For JETEC Focusing Coil No. 109 or equivalent, located with center of air gap 3" from reference line, bias adjusted for 20 ft. L on a 7-3/16" x 5-3/8" picture area, sharply focused at center of screen.
- 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.

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.

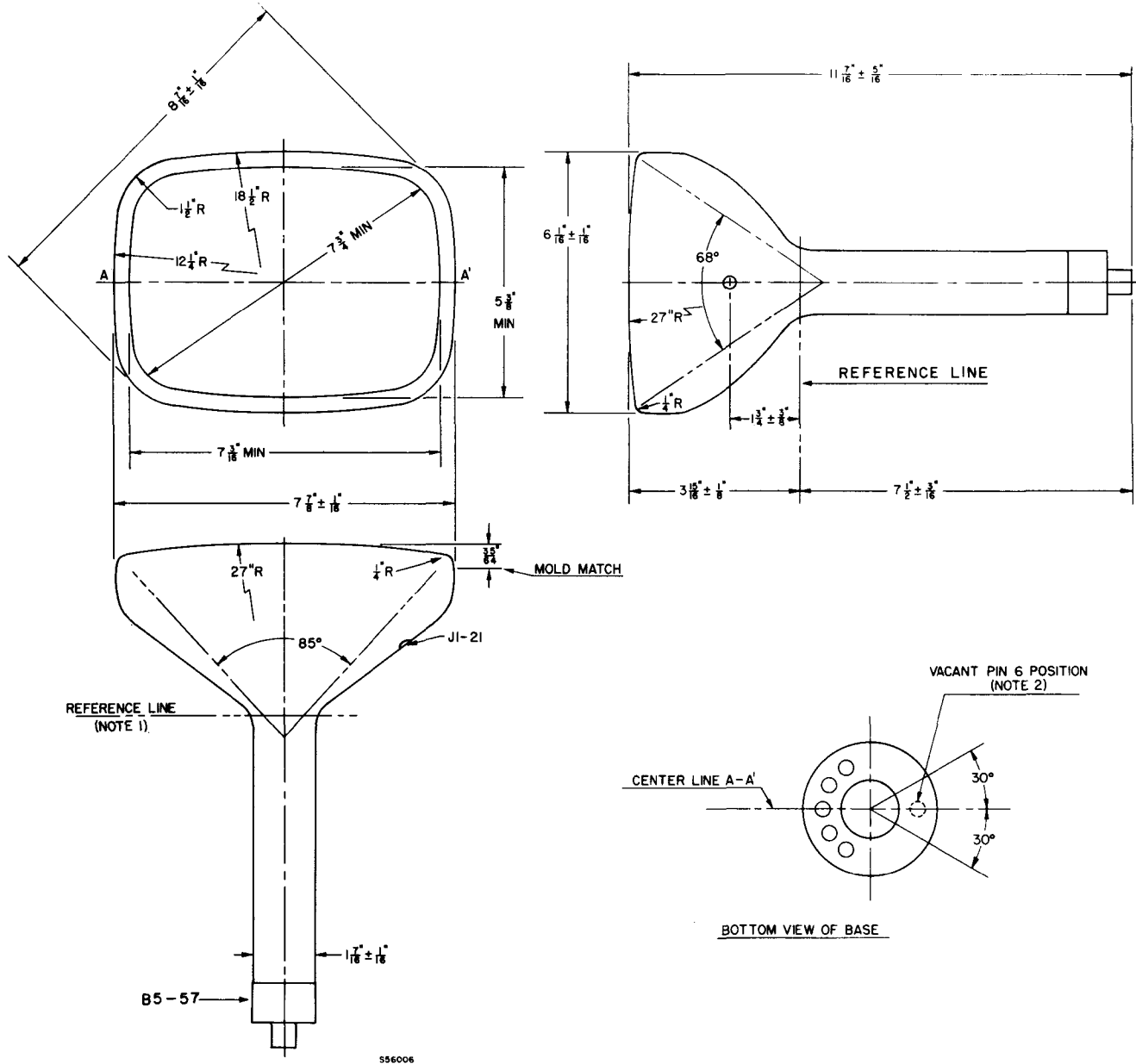


DIAGRAM NOTES:

- Reference line is determined by the plan C-C' of the reference line gauge (JETEC No. 116) when the gauge is seated against the glass cone.
- Anode contact aligns with vacant pin position No. 6 ± 30 degrees.

A Technical Publication of
**SYLVANIA ELECTRIC
PRODUCTS INC.**
EMPORIUM, PA.

