

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Magnetic
Deflection Angles (Approx.)	
Vertical	87 Degrees
Horizontal	105 Degrees
Diagonal	110 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	$0.30 \pm 5\%$ Ampere
Heater Warm-up Time ¹	11 Seconds
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes	4 μf
Grid No. 1 to All Other Electrodes	6 μf
External Conductive Coating to Anode ²	400 μf Max. 200 μf Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)	
Height	5 $\frac{7}{8}$ Inches
Width	7 $\frac{1}{2}$ Inches
Diagonal	7 $\frac{7}{8}$ Inches
Area	39 Sq. Inches
Bulb	C67 $\frac{1}{2}$ Exp. 2 or Equivalent
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base	B6-185
Basing	7FA
Weight (Approx.)	2 Pounds

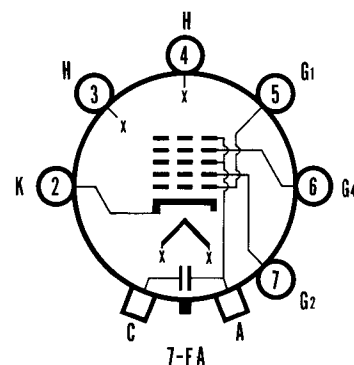
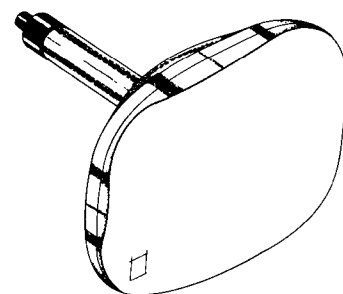
RATINGS

MAXIMUM RATINGS (Design Maximum Values)

Anode Voltage	20,000 Volts	dc
Grid No. 4 (Focusing Electrode)		
Voltage	-550 to +1100 Volts	dc
Grid No. 2 Voltage	550 Volts	dc

QUICK REFERENCE DATA

Television Picture Tube
8" Rectangular, All Glass
Electrostatic Focus
No Ion Trap
110° Magnetic Deflection
Gray Filter Glass
Aluminized Screen
External Conductive Coating
6.3 Volt, 0.30 Amp. Heater



SYLVANIA ELECTRONIC TUBES

A Division of
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PICTURE TUBE OPERATIONS
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File Under
TELEVISION PICTURE TUBES

MAXIMUM RATINGS (Design Maximum Values) (Cont'd.)

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. 4 Voltage for Focus	0 to 400 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage Required for Cutoff ³	-35 to -72 Volts	dc

CIRCUIT VALUES

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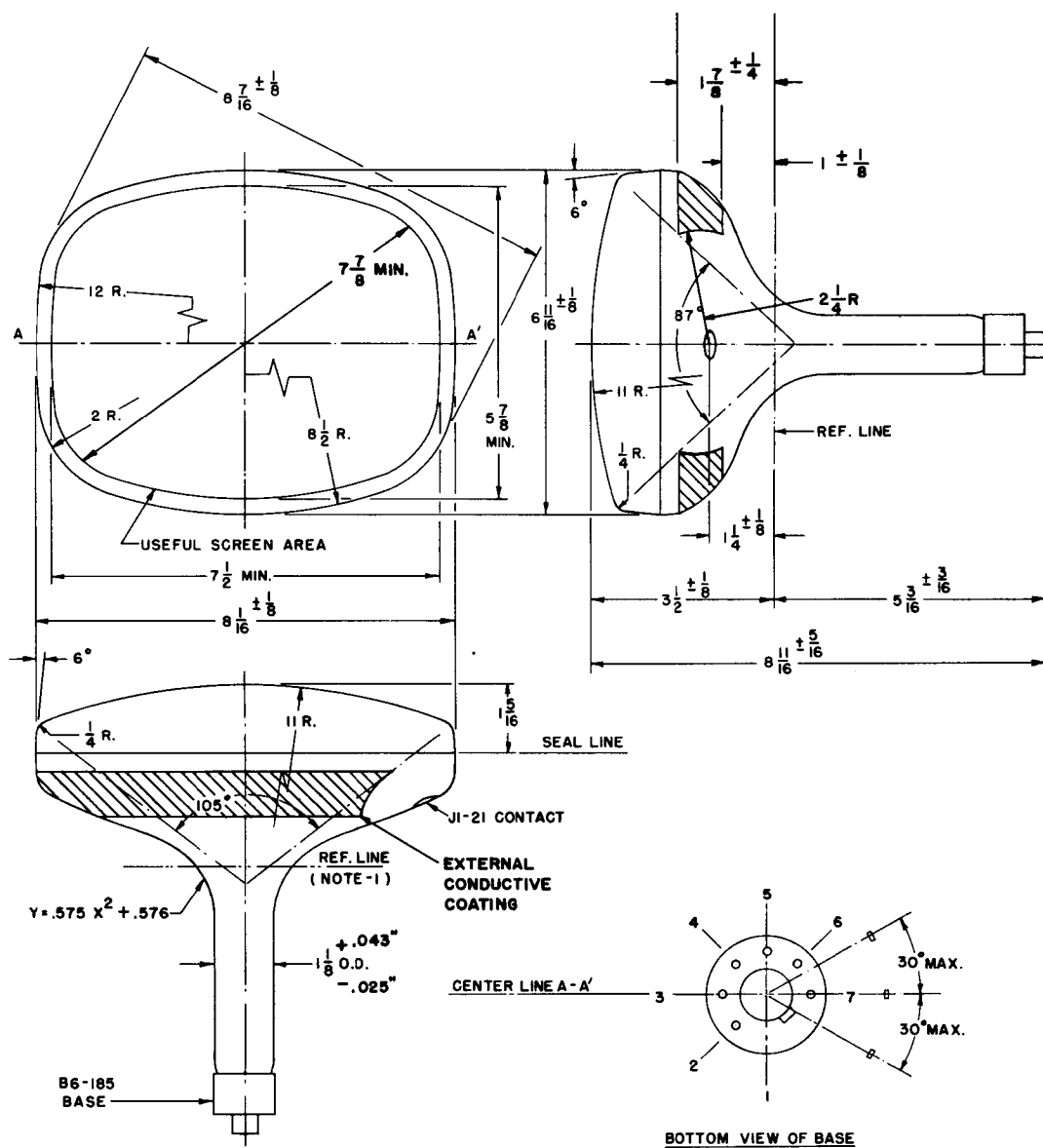
NOTES:

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. 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.

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.

OUTLINE



DB0001

DIAGRAM NOTES:

1. Reference line is determined by the plane C-C' of JEDEC No. 126 reference line gauge when the gauge is seated against the bulb.
2. Base Pin No. 7 aligns with horizontal centerline within 30° and is on same side as anode contact (J1-21).
3. Dimensions are in inches.