

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (approx.)	
Horizontal	105 Degrees
Diagonal	110 Degrees
Vertical	87 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (approx.)	76 Percent

ELECTRICAL DATA

Heater Voltage	6.3 Volts	
Heater Current	$0.6 \pm 5\%$ Ampere	
Heater Warm-up Time ¹	11 Seconds	
Direct Interelectrode Capacitances (Approx.)		
Cathode to All Other Electrodes	5 μ f	
Grid No. 1 to All Other Electrodes	6 μ f	
External Conductive Coating to Anode ²	2500 μ f	Max.
	2000 μ f	Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions	
(Maximum Assured)	$19\frac{1}{16} \times 15\frac{1}{16}$ Inches
Minimum Useful Screen Area	262 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Bulb	J171 G1 or Equivalent
Base	B7-183
Basing	8HR
Weight (approx.)	20 Pounds

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	19,800 Volts	dc
Grid No. 4 Voltage		
(Focusing Electrode)	-550 to +1100 Volts	dc
Grid No. 2 Voltage	550 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	154 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

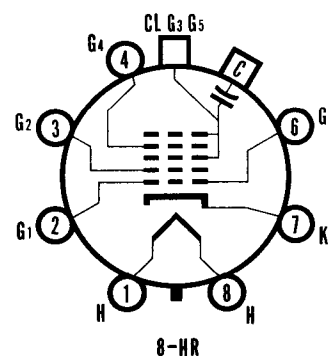
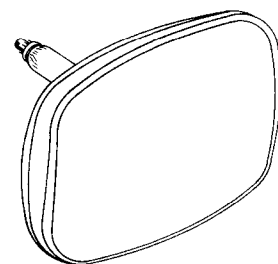
Anode Voltage	17,000 Volts	dc
Grid No. 4 Voltage for Focus	0 to 400 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage required for Cutoff ³	-35 to -72 Volts	dc

CIRCUIT VALUES

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

Television Picture Tube
 21" Direct Viewed
 Rectangular Glass Type
 Lightweight Tube
 Spherical Faceplate
 Gray Filter Glass
 Aluminized Screen
 Electrostatic Focus
 110° Magnetic Deflection
 1 $\frac{1}{8}$ " Neck Diameter
 No Ion Trap
 External Conductive Coating



**SYLVANIA ELECTRIC
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**TELEVISION PICTURE TUBE
 DIVISION
 SENECA FALLS, NEW YORK**

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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.

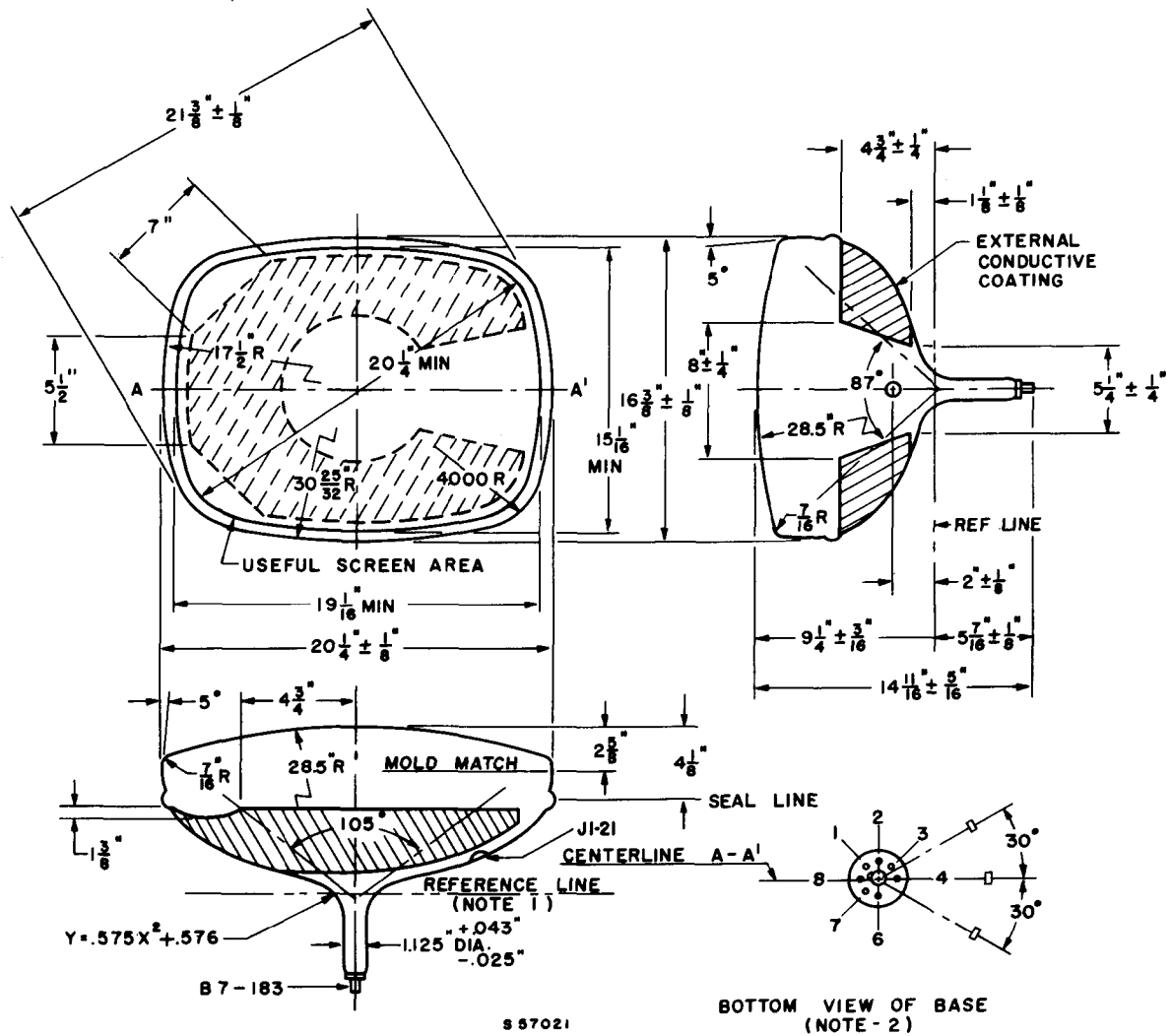


DIAGRAM NOTES:

1. Reference line is determined by plane C-C' of (JETEC No. 126) reference line gauge when the gauge is seated against the bulb.
2. Base pin No. 4 aligns with horizontal centerline of tube within 30° , and is on same side of tube as anode contact (J1-21).

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