

**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 ± 5% Ampere
Heater Warm-up Time <sup>1</sup> . . . . .	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 <sup>2</sup> . . . . .	2500 μμf      Max.
	2000 μμf      Min.

**MECHANICAL DATA**

Minimum Useful Screen Dimensions (Maximum Assured) . . . . .	19 <sup>1</sup> / <sub>16</sub> x 15 <sup>1</sup> / <sub>16</sub> 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**

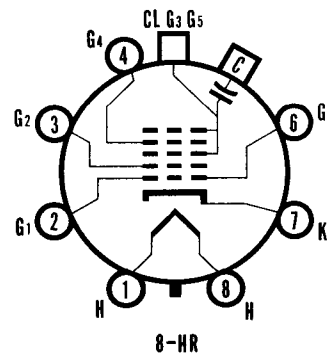
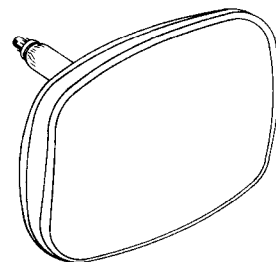
Anode Voltage . . . . .	17,000 Volts	dc
Grid No. 4 Voltage for Focus . . . . .	0 to 400 Volts	dc
Grid No. 2 Voltage . . . . .	300 Volts	dc
Grid No. 1 Voltage required for Cutoff <sup>3</sup> . . . . .	-35 to -72 Volts	dc

**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<sup>1</sup>/<sub>8</sub>" Neck Diameter
- No Ion Trap
- External Conductive Coating



**SYLVANIA ELECTRIC PRODUCTS INC.**

**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.*

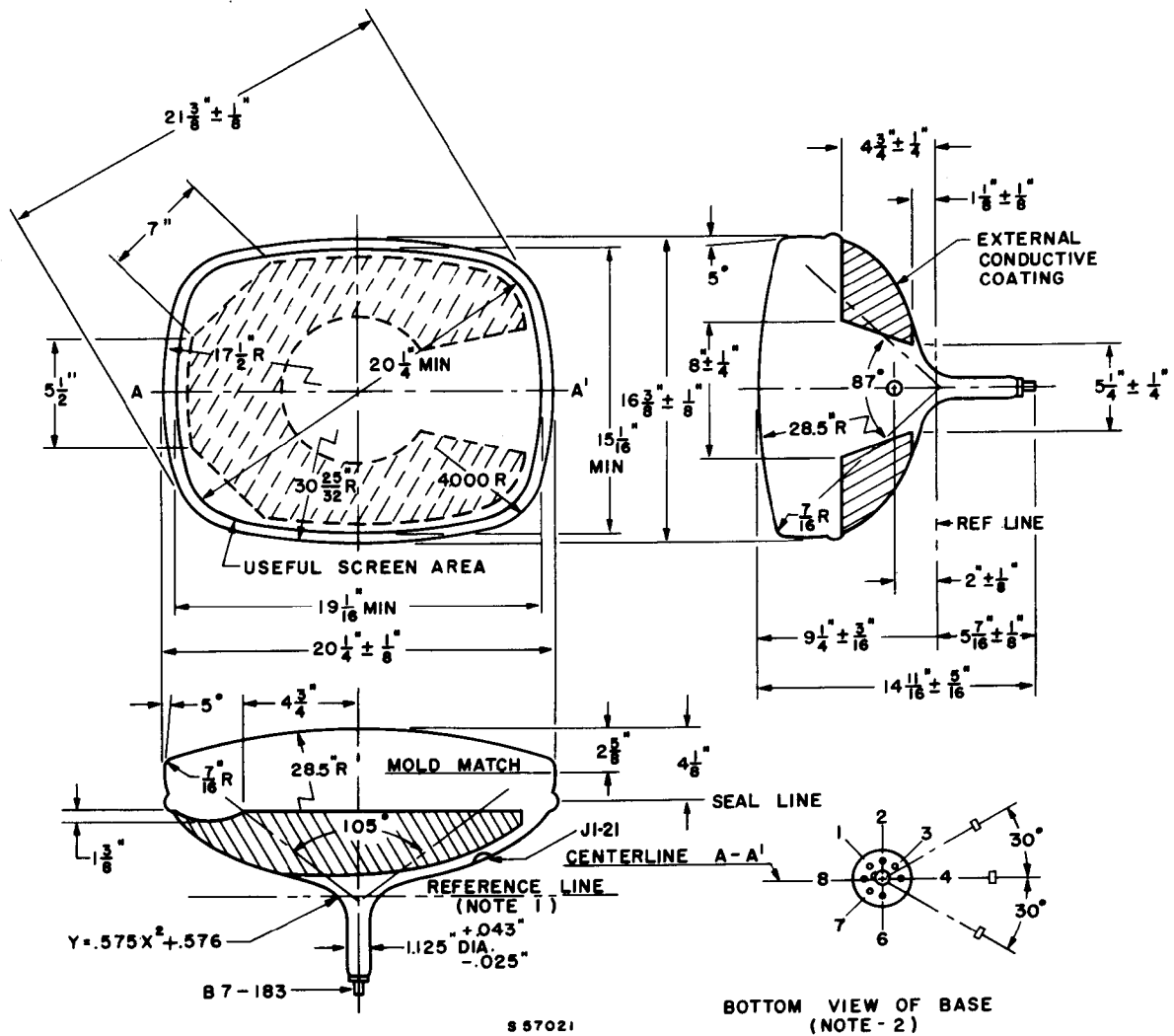


DIAGRAM NOTES:

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  $30^\circ$ , and is on same side of tube as anode contact (J1-21).

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