

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (Approx.)	
Horizontal	104 Degrees
Diagonal	110 Degrees
Vertical	85 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (Approx.)	70 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 μf	
Grid No. 1 to All Other Electrodes	6 μf	
External Conductive Coating to Anode ²	2500 μf	Max.
	2000 μf	Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)	
Height	18 $\frac{5}{8}$ Inches
Width	24 $\frac{1}{4}$ Inches
Diagonal	25 $\frac{3}{4}$ Inches
Minimum Useful Screen Area	425 Sq. Inches
Neck Length	$5\frac{3}{8} \pm \frac{3}{16}$ Inches
Overall Length	$17\frac{5}{16} \pm \frac{3}{8}$ Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Bulb	J214 $\frac{1}{2}$ B
Base	B7-208
Basing	8HR
Weight (Approx.)	41 Pounds

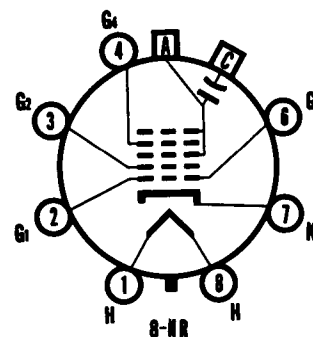
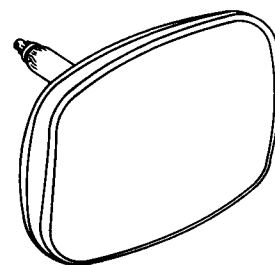
RATINGS

MAXIMUM RATINGS (Design Maximum Values) Grid Drive Service

Maximum Anode Voltage	22,000 Volts	dc
Minimum Anode Voltage	12,000 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	155 Volts	dc
Negative Peak Value	220 Volts	
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Maximum Heater Voltage	6.9 Volts	
Minimum Heater Voltage	5.7 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
27" Direct Viewed
Rectangular Glass Type
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 ELECTRONIC TUBES

A Division of
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PICTURE TUBE OPERATIONS

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File Under

TELEVISION PICTURE TUBES

TYPICAL OPERATING CONDITIONS, Grid Drive Service

Anode Voltage	18,000 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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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

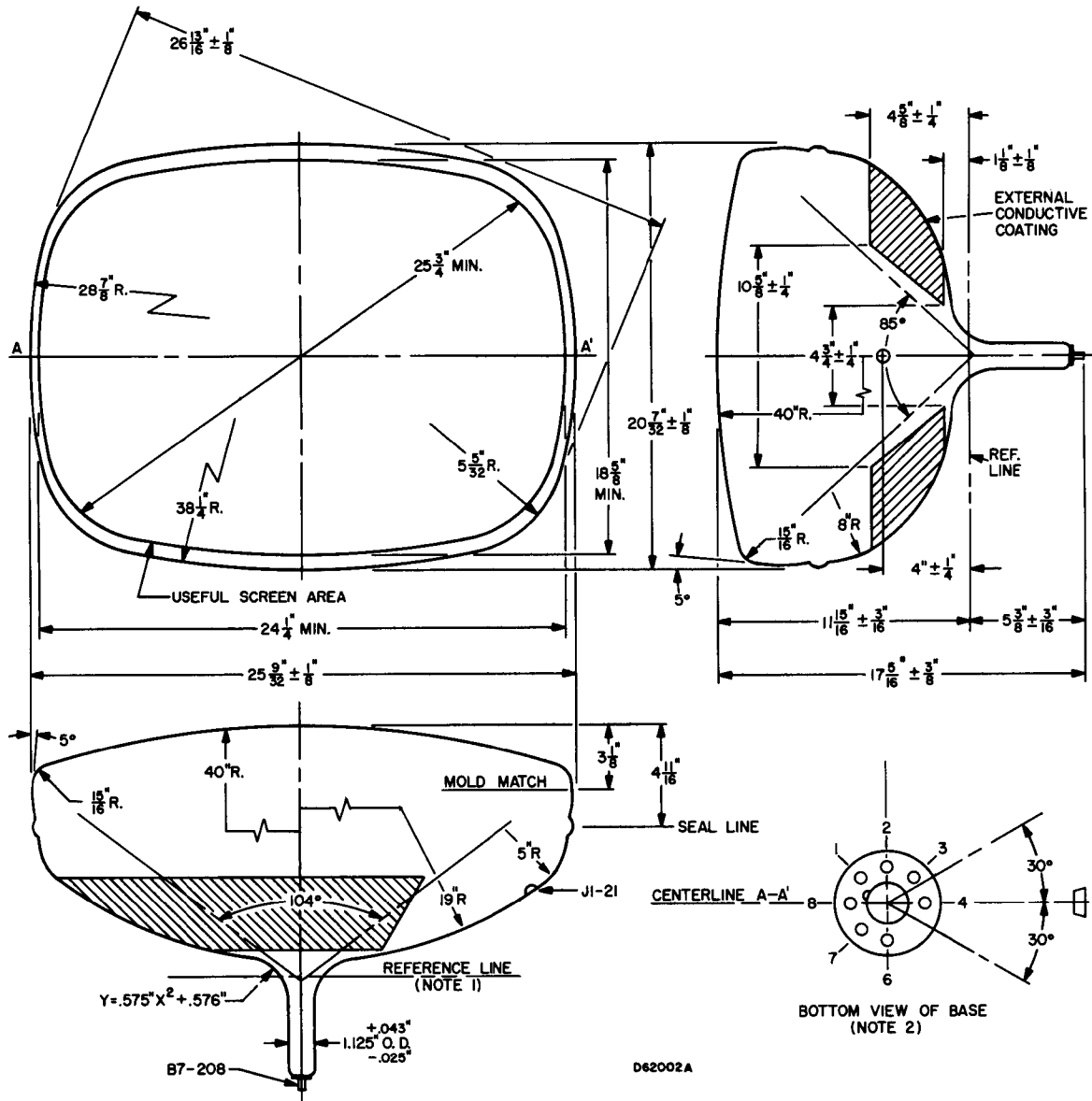


DIAGRAM NOTES:

1. Reference line is determined by Plane C-C' of JEDEC No. 126 Reference Line Gauge, when gauge is seated against the bulb.
2. Base Pin No. 4 aligns with horizontal centerline of tube within 30° , and is on same side as anode contact, J1-21.