



SYLVANIA

engineering data service

24AXP4

from JETEC release
#2271, Sept. 2, 1958

ADVANCE DATA

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.)	75 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	5	μf
Grid No. 1 to All Other Electrodes	6	μf
External Conductive Coating to Anode ²	2500	μf Max.
	1700	μf Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)		
Height	16 7/8	Inches
Width	21 7/16	Inches
Diagonal	22 13/16	Inches
Area	332	Sq. Inches
Bulb	J192C or J192D	
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base	B7-183	
Basing	8HR	
Weight (approx.)	26 1/2	Pounds

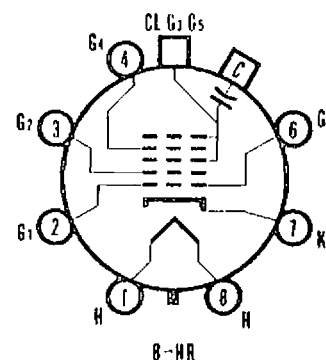
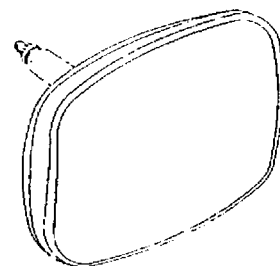
RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	22000	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 Values	2	Volts	

QUICK REFERENCE DATA

Television Picture Tube
24" Direct Viewed
Rectangular Glass Type
Lightweight Tube
Spherical Faceplate
Gray Filter Glass
Aluminized Screen
Electrostatic Focus
110° Magnetic Deflection
1 1/8" Neck Diameter
No Ion Trap
External Conductive Coat-
ing
6.3 Volt, 300 Ma. Heater



SYLVANIA ELECTRIC
PRODUCTS INC.

TELEVISION PICTURE TUBE
DIVISION
SENECA FALLS, NEW YORK

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Page 1 of 3

SYLVANIA

24AXP4

Page 2

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 Cutoff³

-35 to -72 Volts dc

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. 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.

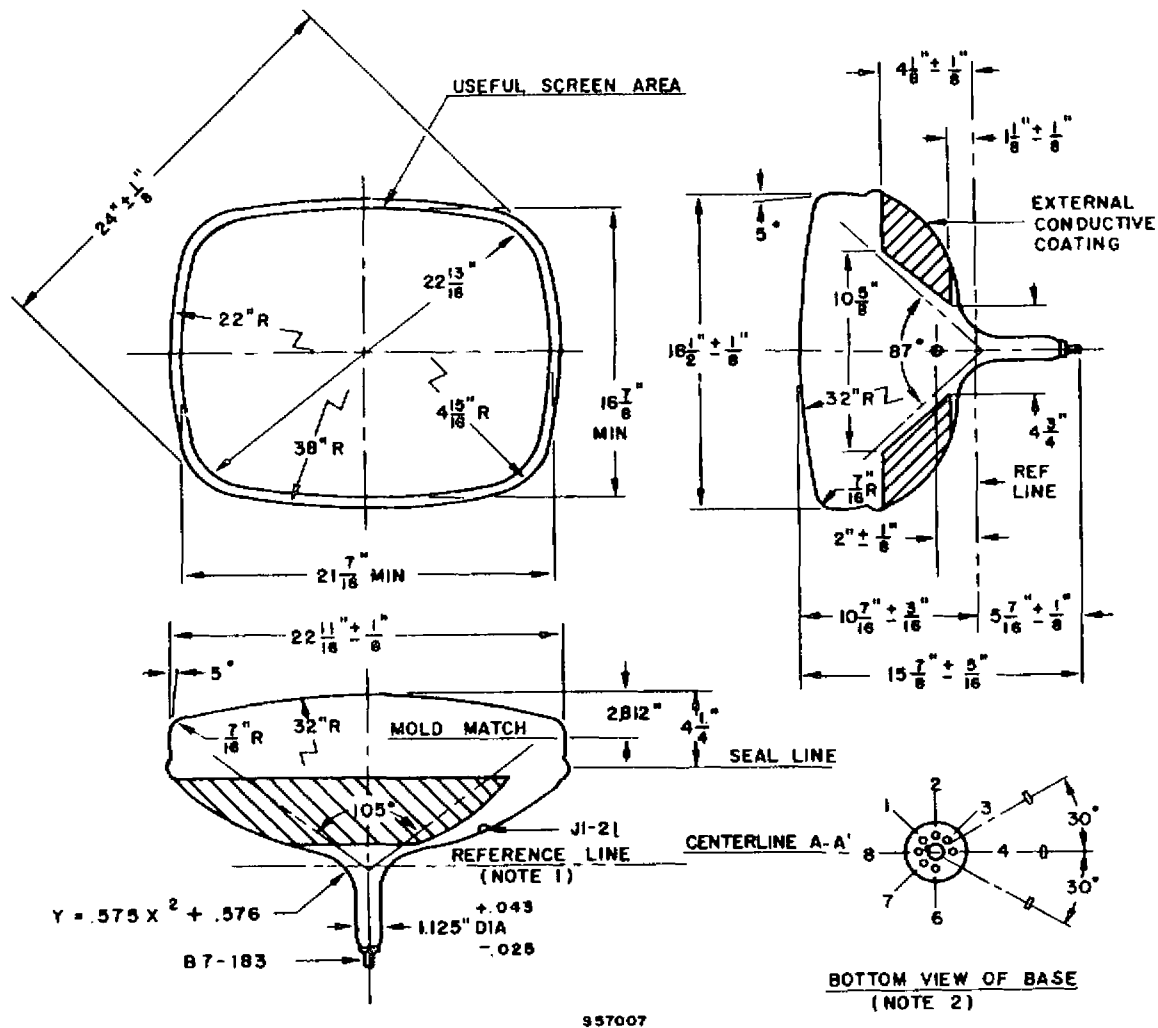


DIAGRAM NOTES:

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 within 30° , and is on same side as anode contact (J1-21).