

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	0.45 ± 5% Ampere
Heater Warm-up Time ¹	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 ²	2500 μμf Max. 1700 μμf 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	22,000 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	154 Volts	dc
Negative Peak Value	220 Volts	
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	

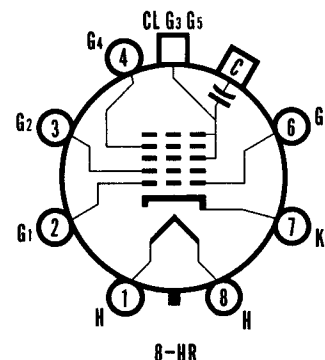
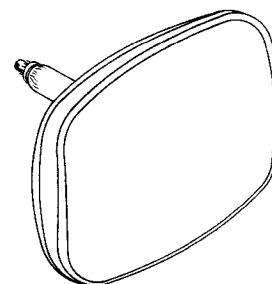
Peak Heater-Cathode Voltage

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

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 Coating
6.3 Volt, 450 Ma. Heater



SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE
DIVISION
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

SEPTEMBER, 1958

PAGE 1 OF 3

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 Megohms Max.
---	------------------

NOTES:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value 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 rated heater voltage divided by 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.

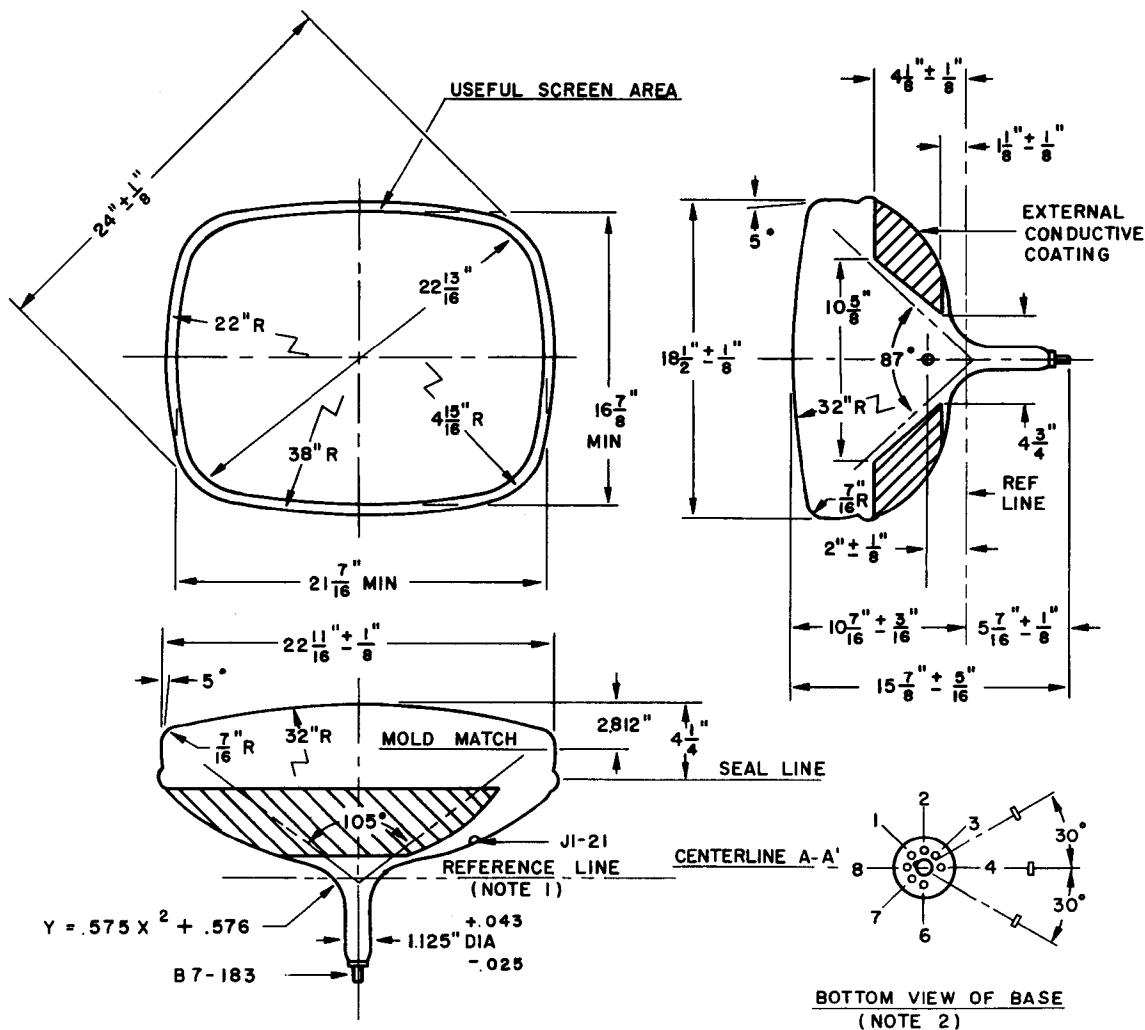


DIAGRAM NOTES:

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).

A Technical Publication of
**SYLVANIA ELECTRIC
PRODUCTS INC.**
EMPORIUM, PA.

