ADVANCE DATA

CHARACTERISTICS

GENERAL DATA

Focusing Method	Tri-Potential 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.)	77	Percent

ELECTRICAL DATA

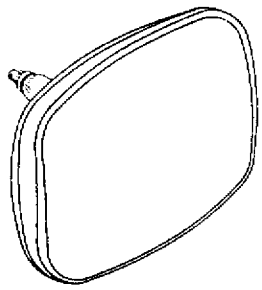
Heater Voltage	2.35	Volts	
Heater Current (±5%)	.600	Ampere	
Heater Warm-up Time[1]	11	Seconds	
Direct Interelectrode Capacitances (Approx.)			
Cathode to All Other Electrodes	3.5	μμf	
Grid No. 1 to All Other Electrodes	4	μμf	
External Conductive Coating to Anode[2]	1400	μμf	Max.
	900	μμf	Min.

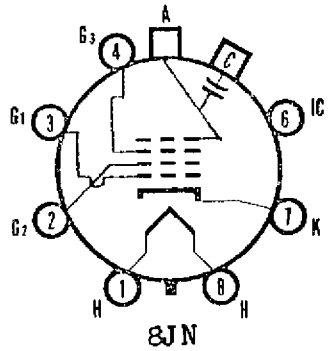
MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)		
Height	11 11/16	
Width	14 3/4	
Diagonal	15 3/4	
Area	155	Sq. Inches
Neck Length	3 5/16 ± 1/8	Inches
Overall Length	10 7/16 ± 1/4	Inches
Bulb	J132 1/2-A or J132 1/2-B	
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base	B7-208	
Basing	8JN	
Weight (Approx.)	10	Pounds

QUICK REFERENCE DATA

Television Picture Tube
17" Direct Viewed
Rectangular Glass Type
Spherical Faceplate
Gray Filter Glass
Aluminized Screen
Tri-Potential
Electrostatic Focus
110° Magnetic Deflection
No Ion Trap
External Conductive
Coating
Short Neck





8JN

SYLVANIA ELECTRIC
PRODUCTS INC.
Picture Tube Operations
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA
September 11, 1958

from JETEC release #2304, Oct. 27, 1958

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values) Grid Drive Service

Anode Voltage	17,600	Volts	dc
Grid No. 3 Voltage (Focusing Electrode)	700	Volts	dc
Grid No. 2 Voltage	700	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 (Grid Drive Service)

Anode Voltage	14,000	Volts	dc
Grid No. 3 Voltage for Focus	0 to +400	Volts	dc
Grid No. 2 Voltage[3]	500	Volts	dc
Grid No. 1 Voltage Required for Cutoff[4]	-43 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. Brightness and resolution improve with increase in Grid No. 2 voltage. A minimum value of 400 volts is recommended.

4. 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 is these tubes are operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

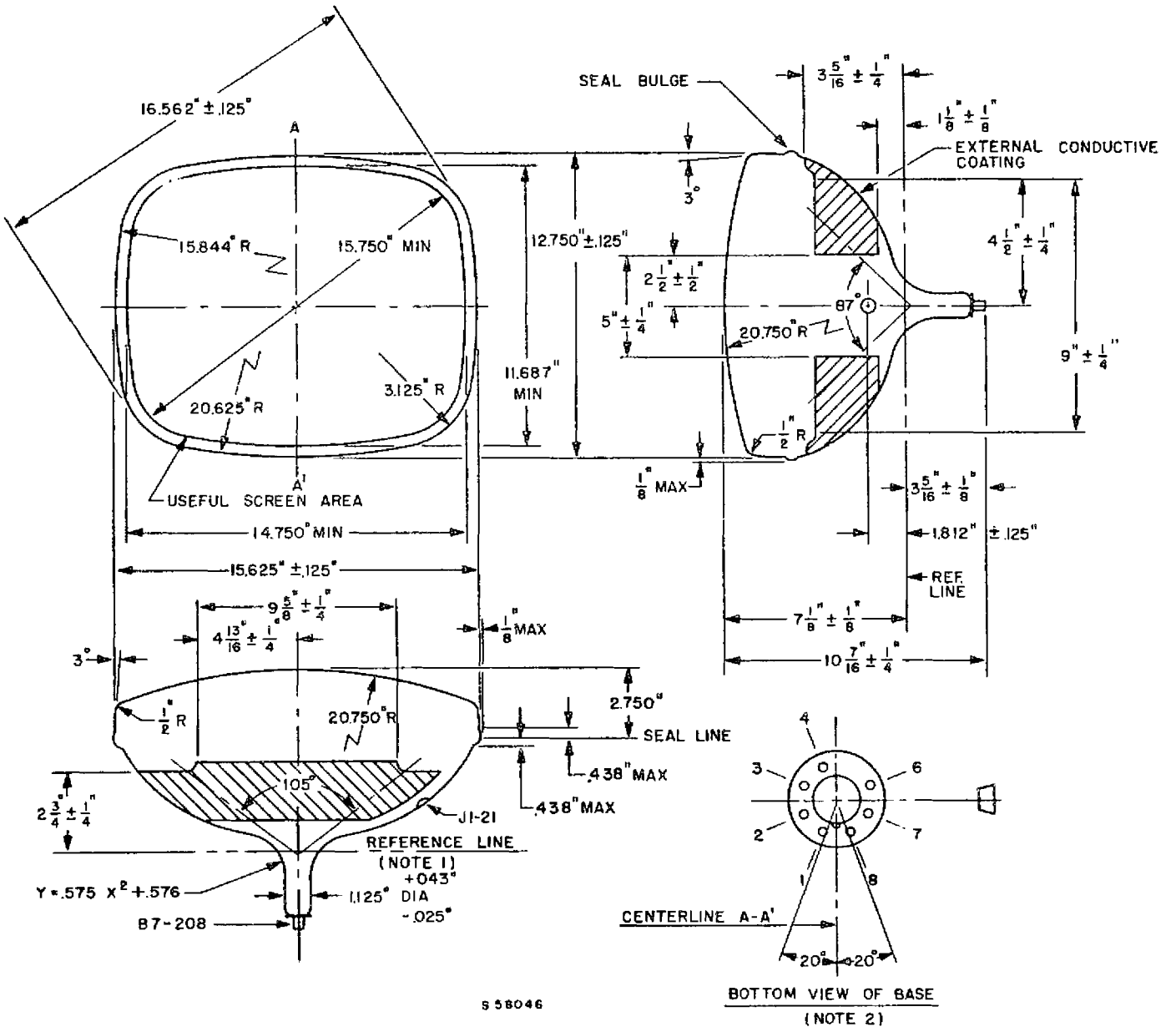


DIAGRAM NOTES:

1. Reference line is determined by plane C-C[1] of JETEC No. 126 Reference Line Gauge, when the gauge is seated against the bulb.

2. Base index key aligns with vertical centerline within 20°. Pins No. 6 and 7 are on same side as anode contact, J1-21.