



# engineering data service

SYLVANIA  
17CVP4

## 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.)	77	Percent

#### ELECTRICAL DATA

Heater Voltage	6.3	Volts	
Heater Current	0.30 ±5%	Ampere	
Heater Warm-up Time <sup>1</sup>	11	Seconds	
Direct Interelectrode Capacitances (approx.)			
Cathode to All Other Electrodes	5	µuf	
Grid No. 1 to All Other Electrodes	6	µuf	
External Conductive Coating to Anode <sup>2</sup>	1500	µuf	Max.
	1000	µuf	Min.

#### MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)	14 3/4 x 11 11/16	Inches
Minimum Useful Screen Area	155	Sq. Inches
Bulb	J132 1/2-A or J132 1/2-B	
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base	B7-183	
Basing	8HR	
Weight (approx.)	10	Pounds

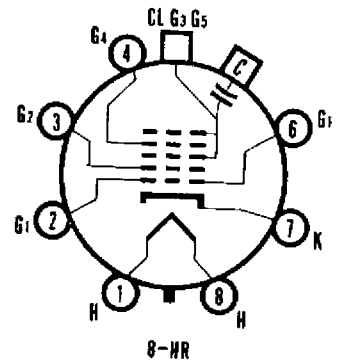
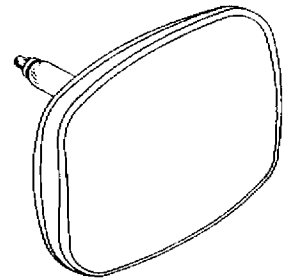
### RATINGS

#### MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	17,600	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	

### QUICK REFERENCE DATA

Television Picture Tube  
17" 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, 300 Ma Heater



SYLVANIA ELECTRIC  
PRODUCTS INC.

TELEVISION PICTURE TUBE  
DIVISION  
SENECA FALLS, NEW YORK

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MAXIMUM RATINGS (Absolute Maximum Values) (Cont'd.)

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	14,000 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.

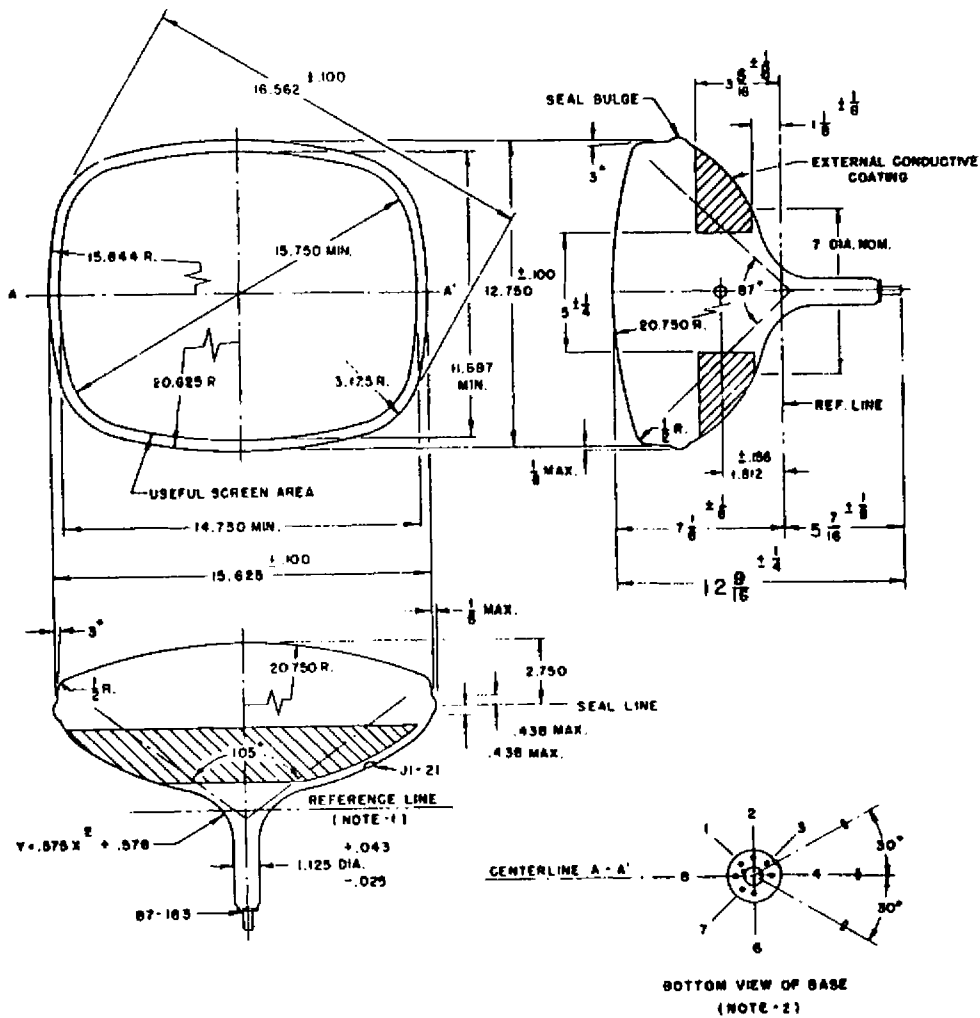


DIAGRAM NOTES:

1. Reference line is determined by plane C-C<sup>1</sup> of JETEC No. 126 Reference Line Gauge, when the gauge is seated against the bulb.
2. Base pin No. 4 aligns with anode contact (J1-21) within 10°.
3. Dimensions are in inches.