



engineering data service

17CMP4

ADVANCE DATA
CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (approx.)	
Horizontal	85 Degrees
Diagonal	90 Degrees
Phosphor	Aluminized P4
Fluorescence	White
Persistence	Short to Medium
Faceplate	Gray Filter Glass
Light Transmittance (approx.)	74 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	μmf	
Grid No. 1 to All Other Electrodes	6	μmf	
External Conductive Coating to Anode ²	1500	μmf	Max.
	1000	μmf	Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions	14 5/16 x 11 1/8	Inches
Minimum Useful Screen Area	149	Sq. Inches
Bulb	J133F or J133G	
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base (Small Shell Duodecal 6-Pin)	B6-63	
Basing	12L	

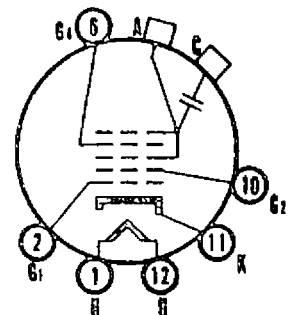
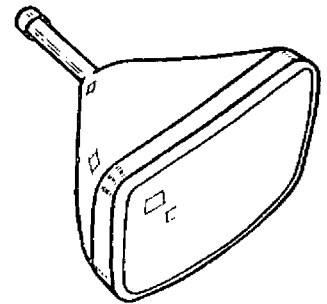
RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)³

Anode Voltage	17,600	Volts	dc
Grid No. 4 Voltage			
(Focusing Electrode)	-550 to +1100	Volts	dc
Grid No. 2 Voltage	70	Volts	dc
Cathode Voltage			
Positive Bias Value	150	Volts	dc
Negative Peak Value	0	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
17" Direct Viewed
Rectangular Glass Type
Spherical Faceplate
Gray Filter Glass
Magnetic Deflection
Electrostatic Focus
No Ion Trap
External Conductive Coating
Aluminized Screen
Short Neck Tube
Cathode Drive Design
Low Grid No. 2 Voltage



12-1

SYLVANIA ELECTRIC
PRODUCTS INC.

TELEVISION PICTURE TUBE
DIVISION
SENECA FALLS, NEW YORK

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TYPICAL OPERATING CONDITIONS ³

Anode Voltage	14,000	Volts	dc
Grid No. 4 Voltage	0 to +400	Volts	dc
Grid No. 2 Voltage	50	Volts	dc
Cathode Voltage Required for Cutoff ⁴	35 to 50	Volts	dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5	Megohms	Max.
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NOTES:

1. Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with $E = 25$ volts and series $R = 31.5$ ohms.
2. External conductive coating must be grounded.
3. This type is designed and rated for cathode-drive service. All voltages shown are positive with respect to Grid No. 1 voltage unless otherwise indicated.
4. For visual extinction of focused raster. Extinction of stationary focused spot will require that these values be increased approximately 5 volts.

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.

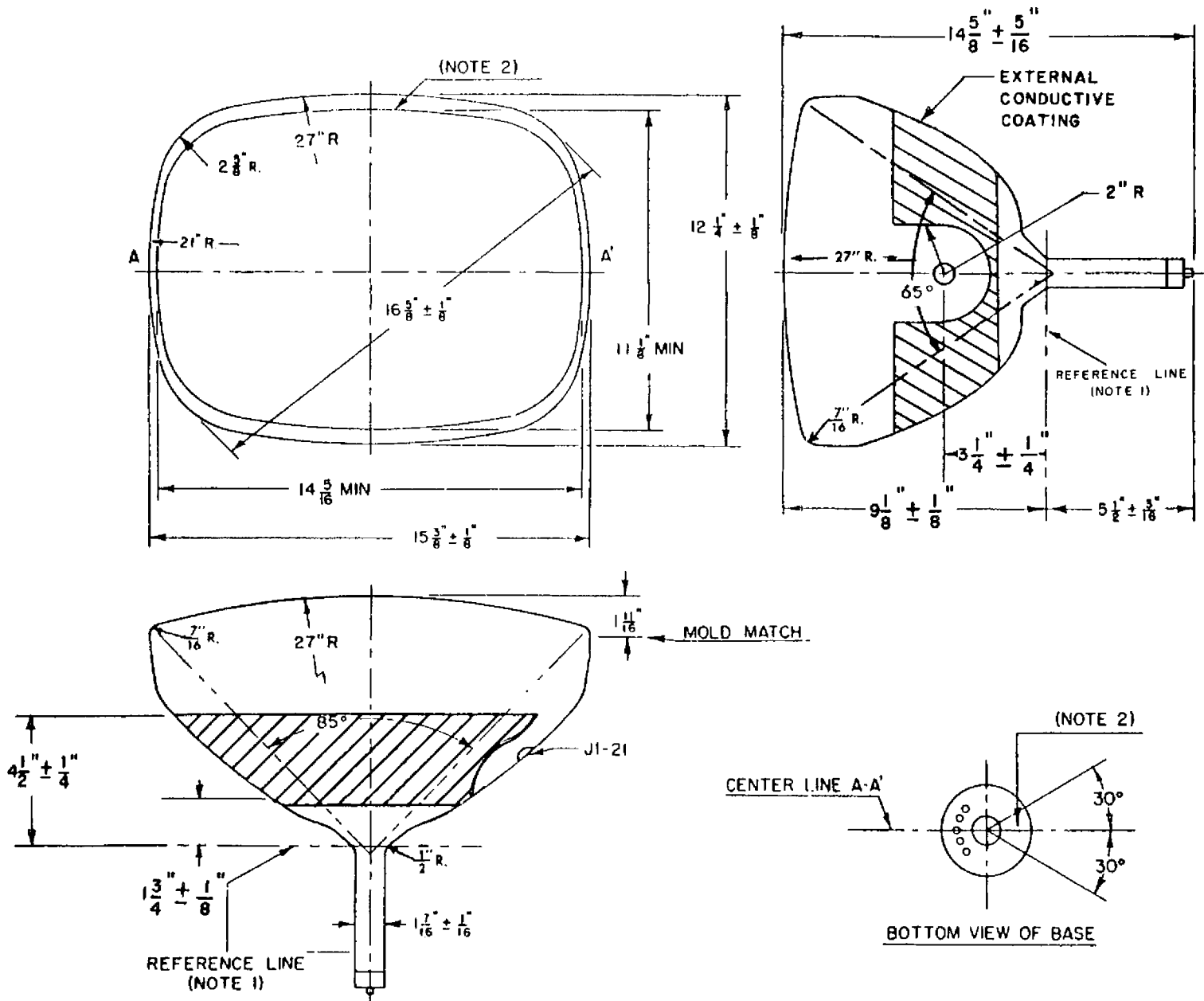


DIAGRAM NOTES:

1. Reference line is determined by the plane C-C' of the reference line gauge (JETEC No. 116) when the gauge is resting on the glass cone.
2. Anode contact aligns with pin position No. 6 ± 30 degrees.