

engineering data service

17GNP4

 from JETEC release
 #2042, Nov. 11, 1957

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.)	77	Percent

ELECTRICAL DATA

Heater Voltage	6.3	Volts
Heater Current	0.6 ± 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	1500	μμf Max.
	1000	μμf 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 C or Equivalent	
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base (Small Shell Duodecal 6-Pin)	B6-63	
Basing	12L	
Weight (approx.)	10 1/2	Pounds

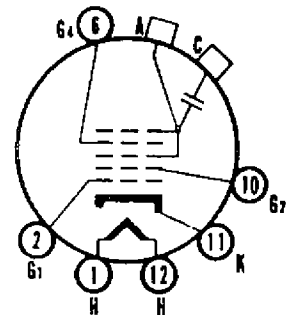
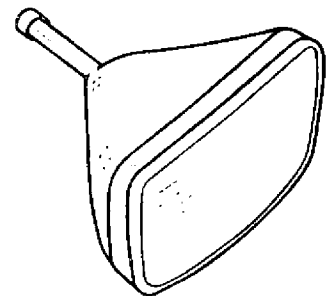
RATINGS

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
 Lightweight Tube
 Spherical Faceplate
 Gray Filter Glass
 Aluminized Screen
 Electrostatic Focus
 90° Magnetic Deflection
 Short Neck Tube
 No Ion Trap
 External Conductive Coating
 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 for Focus	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 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 increase 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.

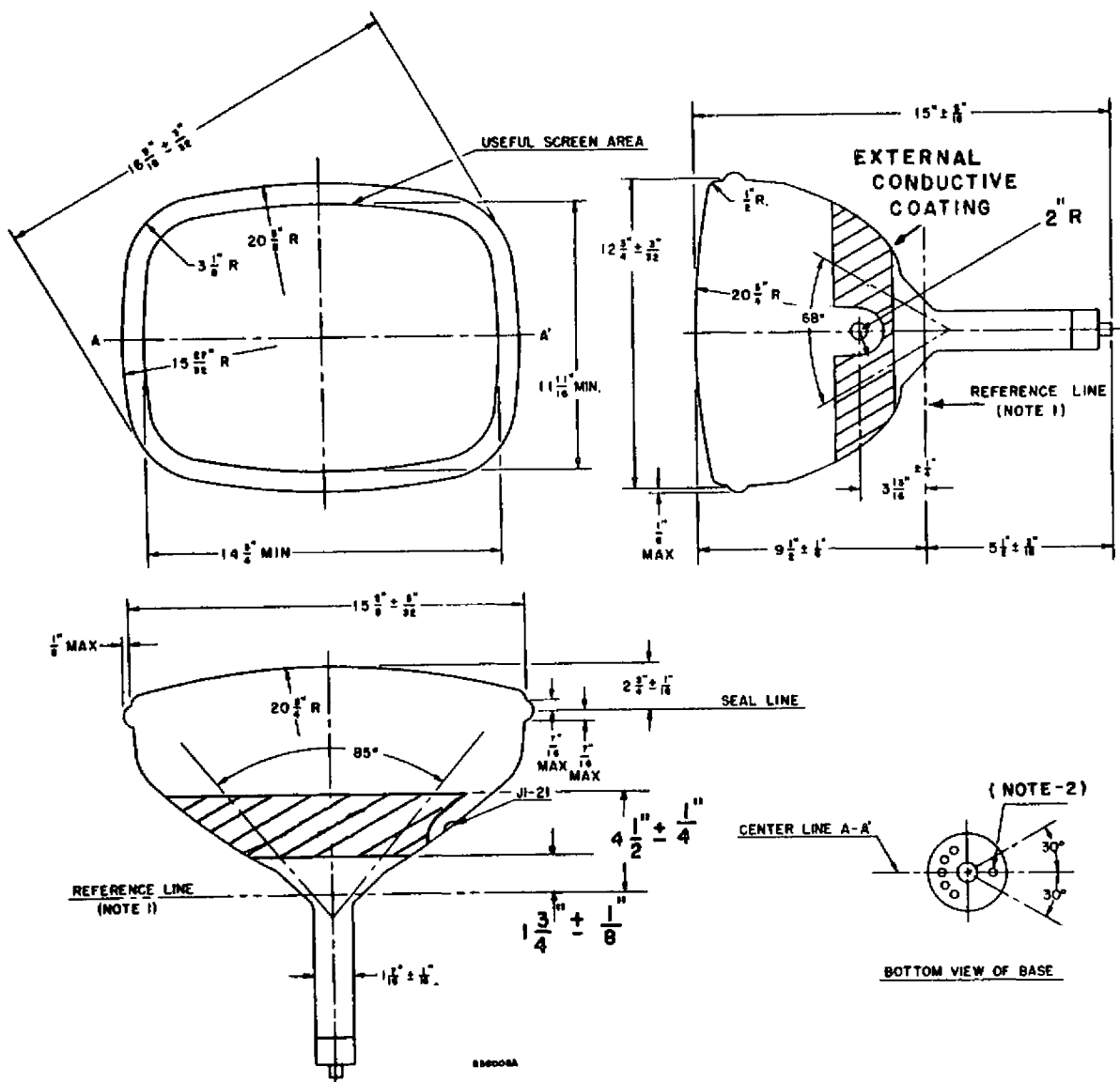


DIAGRAM NOTES:

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.