

CHARACTERISTICS

GENERAL DATA

Focusing Method Electrostatic
Deflecting Method Magnetic
Deflecting Angle-Diagonal (Approx.) 90 Degrees
Horizontal 85 Degrees
Vertical 68 Degrees

Phosphor P4 Aluminized
Fluorescence White
Persistence Medium
Faceplate Gray Filter Glass
Light Transmission (approx.) 79 Percent

ELECTRICAL DATA

Heater Voltage 6.3 Volts
Heater Current 45 Ampere $\pm$ 10%
Direct Interelectrode Capacitances (approx.)
Cathode to All Other Electrodes 5 uuf
Grid No. 1 to All Other Electrodes 6 uuf
Ion Trap Magnet None

MECHANICAL DATA

Minimum Useful Screen Dimensions 14 3/4 x 11 11/16 Inches
Minimum Useful Screen Area (approx.) 155 Sq. In.
Bulb Contact (Recessed Small Cavity Cap) J1-21
Base (Small Shell Duodecal 6 Pin) JETEC B6-63
Basing 12L
J1-21 Contact Aligns with Pin Position No. 6 $\pm$ 30 Degrees

RATINGS

MAXIMUM RATINGS (Design Center Values)

Anode Voltage (Note 1) 16,000 Volts dc
Grid No. 4 Voltage (focusing electrode) ... -500 to $\neq$ 1000 Volts dc
Grid No. 2 Voltage 500 Volts dc
Grid No. 1 Voltage
Negative Bias Value 140 Volts dc
Positive Bias Value 0 Volts dc
Positive Peak Value 2 Volts
Peak Heater-Cathode Voltage (Note 2)
Heater Negative with Respect to Cathode
During Warm-up Period Not to exceed .. 15 sec. 410 Volts dc
After Equipment Warm-up Period 180 Volts dc
Heater Positive with Respect to Cathode 180 Volts dc

RECOMMENDED OPERATING CONDITIONS

Anode Voltage 14,000 Volts dc
Grid No. 4 Voltage (Note 3) -50 to $\neq$ 350 Volts dc
Grid No. 2 Voltage 300 Volts dc
Grid No. 1 Voltage (Note 4) -28 to -72 Volts dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Max. Megohm
External Conductive Coating to Anode
Capacitance 1500 uuf. Max.
..... 1200 uuf. Max.

THE 17CEP4 IS A DIRECT-VIEW PICTURE TUBE FOR USE IN TELEVISION RECEIVERS AND INCLUDES SUCH FEATURES AS:

- A short straight electron gun not requiring an ion trap.
- 6.3V. - 450 MA heater.
- Short neck
- A gray tinted face affording approximately 79% light transmission
- Rectangular Glass Type
- Spherical light weight face.
- Electrostatic Focus
- Metal Backed Screen

NOTES:

1. Grid No. 5, Grid No. 3, and the collector are connected together within the tube, are referred to herein as anode.
2. Cathode should be returned to one side or to the mid-tap of the heater transformer winding.
3. For focus with anode current of 100 ua and 14 3/4" x 11 11/16" raster.
4. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

THOMAS ELECTRONICS, INC.
118 Ninth Street
Passaic, N. J.
Gregory 3-4040

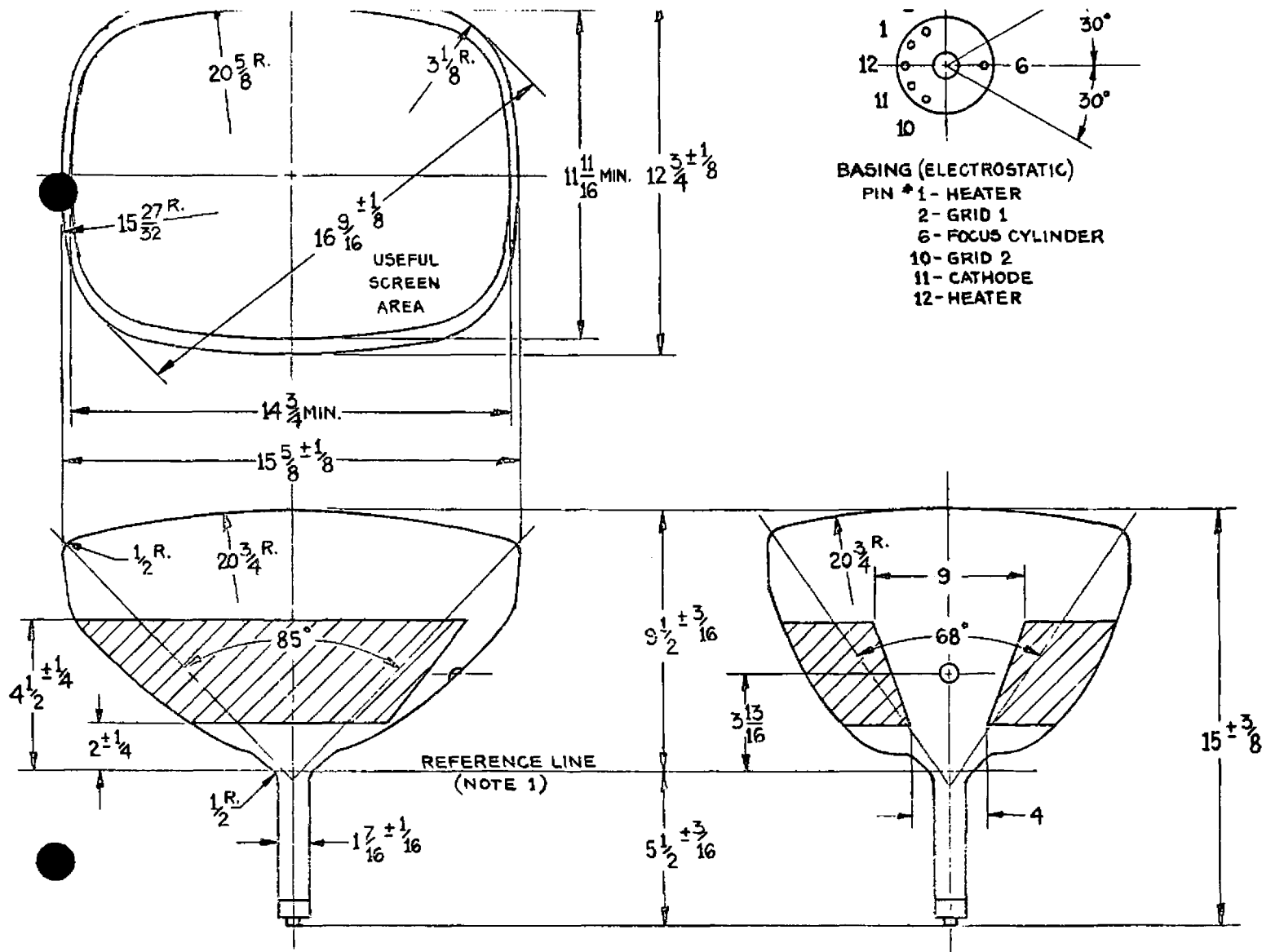


DIAGRAM NOTES:

1. Reference line is determined by the plane C-C1 of the reference line gauge (JETEC No. 116) when the gauge is resting on the glass cone. The neck diameter near the cone may exceed 1.500" but is limited by the internal contour of the yoke reference line gauge.

2. The plane through the tube axis and pin position No. 6 may vary from the plane through the tube axis and anode terminal by an angular tolerance (measured about the tube axis) of 30° . Anode terminal is on same side as pin position No. 6.

WARNING:

X-Ray Warning. If this tube is operated in excess of 16,000 Volts, X-Ray shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range. Such protection may be provided by the protective face viewing window of apparatus using tubes of this type. Protection is sufficient if the radiation measured in contact with the window is less than 6.25 MR/hr.

Additional data will be furnished by our engineering department upon request.