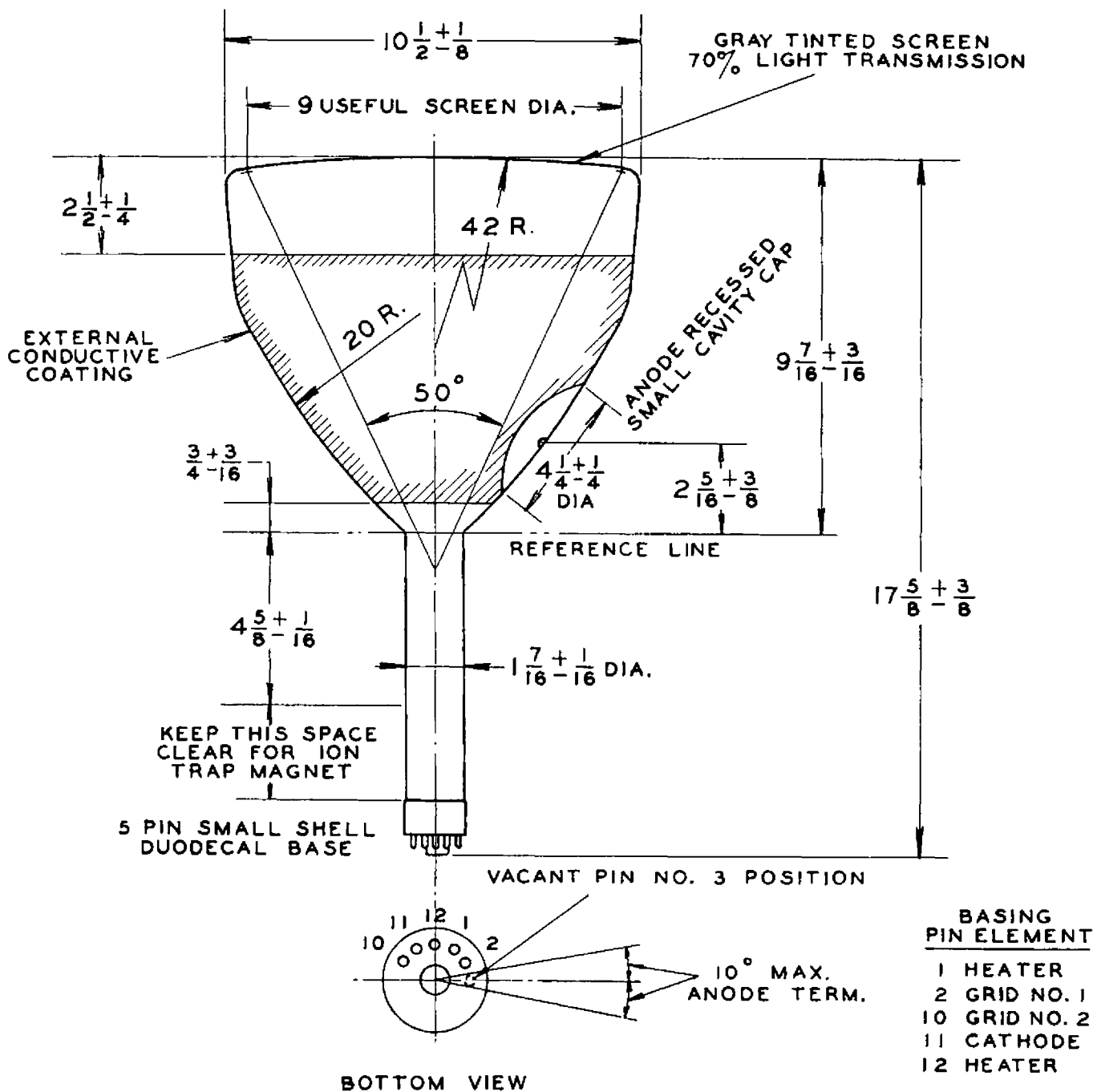


Sheldon

TYPE 10BP4D

10BP4C - SAME AS 10BP4D EXCEPT IT HAS A CLEAR FACE PLATE



NOTE:

REFERENCE LINE:- POINT WHERE $1.500 \pm .003$ DIA. RING GAUGE, 2' LONG, (RETMA No. 112) WILL STOP AGAINST BULB.

SHELDON ELECTRIC CO.
DIVISION OF ALLIED ELECTRIC PRODUCTS INC.
68-98 COIT STREET, IRVINGTON 11, N. J.



Sheldon 10BP4D

10" Directly Viewed Kinescope With Ion Trap and
Metal Backed Screen

GENERAL CHARACTERISTICS

Directly viewed picture tube intended for use in television receivers. The tube utilizes magnetic focus and magnetic deflection and contains an electron gun designed to be used with an ion trap magnet. This tube contains a reflective metal backed screen to increase light output.

10BP4C - SAME AS 10BP4D EXCEPT IT HAS A CLEAR FACE PLATE

ELECTRICAL

Heater Voltage 6.3 Volts
Heater Current $0.6 \pm 10\%$ Amperes
Focusing Method Magnetic
Deflecting Method Magnetic
Deflecting Angle 50 Approx. Deg.
Phosphor No. 4
Fluorescence White
Persistence Medium
External Conductive Coating
To Anode No. 2 2500 Max. μuf
500 Min. μuf

DIRECT INTERELECTRODE CAPACITANCES.

Cathode to all other electrodes 5.0 μuf
Grid No. 1 to all other electrodes 6.0 μuf

MECHANICAL

Overall Length $17 \frac{5}{8}'' \pm \frac{1}{4}''$
Greatest Diameter of Bulb $10 \frac{1}{2}'' \pm \frac{1}{8}''$
Minimum Useful Screen Diameter 9 inches
Bulb Contact, Recessed Small Cavity Cap
JETEC Designation J1-21
Base, Small Shell Duodecal, 5-Pin
JETEC Designation B5-57
Basing JETEC Designation 12D
Bulb Contact aligns with Pin #3
(vacant) ± 10 Degrees

MAXIMUM RATINGS (Design Center Values)

Anode Voltage 10,000 Max. Volts D-C
Grid No. 2 Voltage 410 Max. Volts D-C

GRID NO. 1 VOLTAGE

Negative-Bias Value 125 Max. Volts D-C
Positive-Bias Value 0 Max. Volts D-C
Positive Peak Value 2 Max. Volts

PEAK HEATER CATHODE VOLTAGE

Heater Negative with respect to cathode
(Note 1) 125 Max. Volts. D-C
Heater Positive with respect to cathode
125 Max. Volts. D-C

JETEC COMPARATIVE CONDITIONS

Anode Voltage 9,000 Volts D-C
Grid No. 2 Voltage 250 Volts D-C
Grid No. 1 Voltage (Note 2) -27 to -63 Volts D-C
Focusing Coil Current (Note 3) 110 Approx. Milliamperes D-C
Ion Trap Current (Note 4) 85 Approx. Milliamperes D-C

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms

NOTES

1. A value of 410 max. volts is allowed during equipment warm-up period not to exceed 15 seconds.
2. Visual extinction of undeflected focused spot.
3. For RETMA standard focus coil #106 or equivalent with the combined grid No. 1-bias voltage and video-signal voltage adjusted to produce a highlight brightness of 20 foot lamberts on a 6" x 8" picture area. Distance from reference line of bulb to center of focus coil air gap shall be 3.25 inches.
4. With JETEC standard ion trap magnet #111 or equivalent.