Sheldon

TYPE 10BP4D

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

NOTE:
REFERENCE LINE: POINT WHERE 1.500" +.003" - .000" DIA. RING GAUGE, 2'
LONG, (RETMA No. 112) WILL STOP AGAINST BULB.

SHELDON ELECTRIC CO.
DIVISION OF ALLIED ELECTRIC PRODUCTS INC.
68-88 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 .................................. 0.8 ± 10% Amps
- 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. uuf
500 Min. uuf

DIRECT INTERELECTRODE CAPACITANCES.

- Cathode to all other electrodes ................... 5.0 uuf
- Grid No. 1 to all other electrodes ................. 8.0 uuf

MECHANICAL

- Overall Length .................................. 17 5/8" ± 1/4"
- Greatest Diameter of Bulb ....................... 10 1/2" ± 1/4"
- 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 #9
  (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
  (Note 1) ...................................... 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.