Diameter 3" Nominal

3EB3P

Oscilloscope Tube

Electrostatic Focus. Electrostatic Deflection.

Data

General:
- Heater: Voltage: 6.3 a.c. or d.c. volts.
  Current: 0.6 amp.
- Direct Inter-electrode Capacitances:
  - Modulator to all other electrodes: 10.5 \( \mu \)F.
  - Each X Plate to all other electrodes: 11.0 \( \mu \)F.
  - Each Y Plate to all other electrodes: 9.0 \( \mu \)F.
  - Deflector Plates X1 to X2: 4.0 \( \mu \)F.
  - Deflector Plates Y1 to Y2: 3.5 \( \mu \)F.
- Screen:
  - Fluorescence: Blue.
  - Persistence: Very Short (10 \( \mu \)sec. max. for 1% of initial brightness).
- Focussing Method: Electrostatic.
- Deflecting Method: Electrostatic.
- Overall Length: 254 \( \pm \) 6 mm.
- Greatest Diameter of Bulb: 77.8 mm.
- Minimum Useful Screen Diameter: 69.0 mm.
- Mounting Position: Any.
- Anode Cap: Recessed Ball BSS448/CT7.
- Base: B.14A.

Pin 1—Heater.
Pin 2—Cathode.
Pin 3—Modulator.
Pin 4—No connection.
Pin 5—Anode 2.
Pin 7—Y1.

Pin 8—Y2.
Pin 9—Anode 1 and Anode 3.
Pin 10—X2.
Pin 11—X1.
Pin 12—No connection.
Pin 14—Heater.
Cap—Anode 4 P.D.A.

Typical Operating Conditions:
- Anode 1 and Anode 3 (2500 volts max.): 1500 volts.
- Anode 2: 350/500 volts.
- Anode 4 P.D.A. (5000 volts max.): 3000 volts.
- Modulator volts for cut-off: -65 volts max.

Deflection Sensitivity:
- X Plate: 0.15 to 0.2 mm./volt
- Y Plate: 0.2 to 0.27
Note 1. The angle between the trace produced by X1, X2 and a plane through the tube axis, Pin 5 and the P.D.A. Cap may vary by an angular tolerance of 10°. The P.D.A. Cap is on the same side of the tube as Pin 5.

Note 2. The angle between the trace produced by X1 and X2 and the trace produced by Y1 and Y2 is 90° ± 3°.

Note 3. The undeflected focused spot will fall within a circle having a 7 m.m. radius concentric with the centre of the tube face.

Note 4. When viewing the screen with the tube positioned such that Pin No. 5 is on the left, a positive voltage applied to the terminal X1 will deflect the spot to the left and a positive voltage applied to the terminal Y1 will deflect the spot upwards.