

DIAMETER 3½" NOMINAL

**90ED4P**

# Oscilloscope Tube

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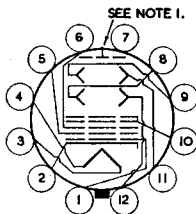
ELECTROSTATIC FOCUS. ELECTROSTATIC DEFLECTION

**DATA**

**GENERAL :**

Heater: Voltage . . . . .	4.0 . . . . .	a.c. or d.c. volts.
Current . . . . .	1.0 . . . . .	amp.
Direct Inter-electrode Capacitances.		
Modulator to all other electrodes . . . . .		25μf.
Each X Plate to all other electrodes . . . . .		25μf.
Each Y Plate to all other electrodes . . . . .		25μf.
One X to one Y Deflector Plate . . . . .		6μf.
Cathode to all other electrodes . . . . .		15μf.
Screen :		
Fluorescence . . . . .		Blue.
Afterglow . . . . .		Yellow.
Persistence of Afterglow . . . . .		Long.
	(10 sec. min./100 sec. max. for 1% initial brightness)	
Focusing Method . . . . .		Electrostatic.
Deflecting Method . . . . .		Electrostatic.
Overall Length . . . . .		332 ± 8 mm.
Greatest Diameter of Bulb . . . . .		92 mm.
Minimum Useful Screen Diameter . . . . .		70 mm.
Mounting Position . . . . .		Any.
Anode Cap . . . . .		Recessed Small Ball.
Base . . . . .		B.12.D.

- Pin 1—Modulator.
- Pin 2—Cathode.
- Pin 3—Heater.
- Pin 4—Heater.
- Pin 5—Anode 1.
- Pin 6—Anode 2.
- Pin 7—No connection.



- Pin 8—Y2.
- Pin 9—X2.
- Pin 10—Anode 3 and Internal Conductive coating.
- Pin 11—X1.
- Pin 12—Y1.
- Cap—Anode 4 P.D.A.

**Typical Operating Conditions :**

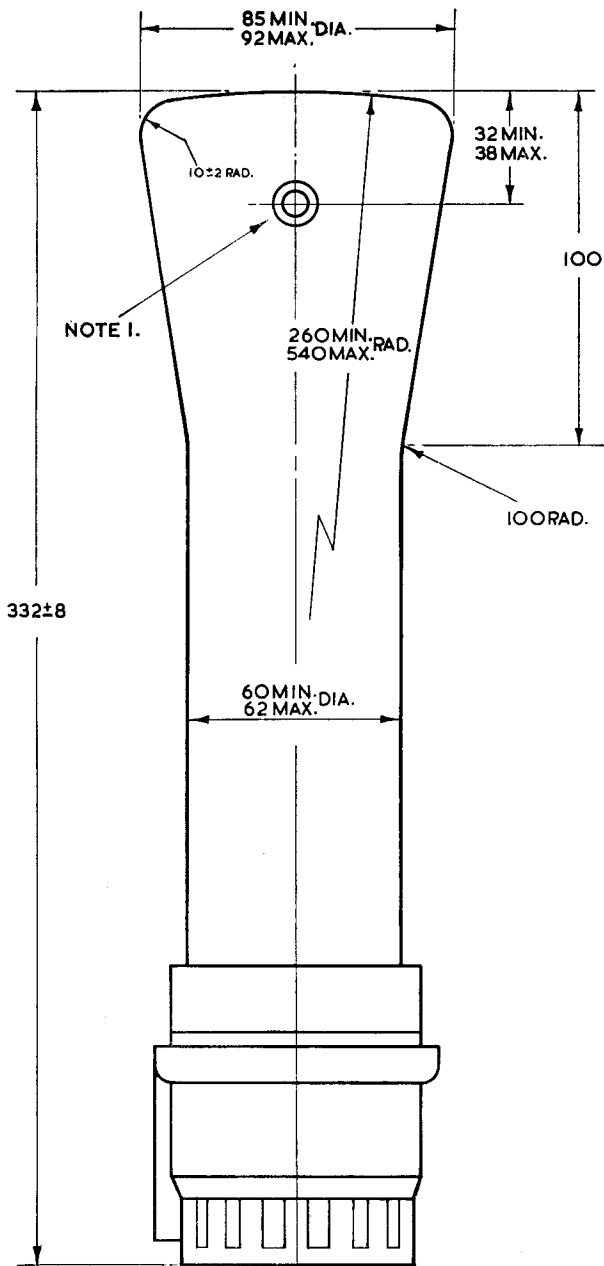
Anode 1 . . . . .	2000 volts.
Anode 2 . . . . .	380 volts.
Anode 3 (4000v. max.) . . . . .	2000 volts.
Anode 4 Post Deflector Accelerator (6000v. max.) . . . . .	4000 volts.
Modulator volts for cut-off . . . . .	-40 to -80 volts.

**Deflection Sensitivity :**

	mm/volt.
X Plate . . . . .	0.140
Y Plate . . . . .	0.320

**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 6 mm. radius concentric with the centre of the tube face.



ALL SIZES IN MILLIMETRES.

**Note 1.** When viewing the screen with the tube positioned such that the base spigot is uppermost, 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.