

90ED4**Oscilloscope Tube****90ED4**

ELECTROSTATIC FOCUS. ELECTROSTATIC DEFLECTION

GENERAL :**DATA**

Heater: Voltage	4.0	a.c. or d.c. volts.
Current	1.0	amp.
Direct Inter-electrode Capacitances.		
Modulator to all other electrodes	25 μ mf.	
Each X Plate to all other electrodes	25 μ mf.	
Each Y Plate to all other electrodes	25 μ mf.	
One X to one Y Deflector Plate	6 μ mf.	
Cathode to all other electrodes	15 μ mf.	
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 \pm 8 mm.	
Greatest Diameter of Bulb	90 mm.	
Minimum Useful Screen Diameter	70 mm.	
Mounting Position	Any.	
Base	B.12.D.	

Pin 1—Modulator.

Pin 2—Cathode.

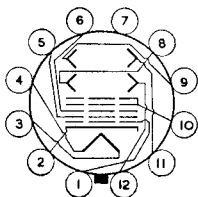
Pin 3—Heater.

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.

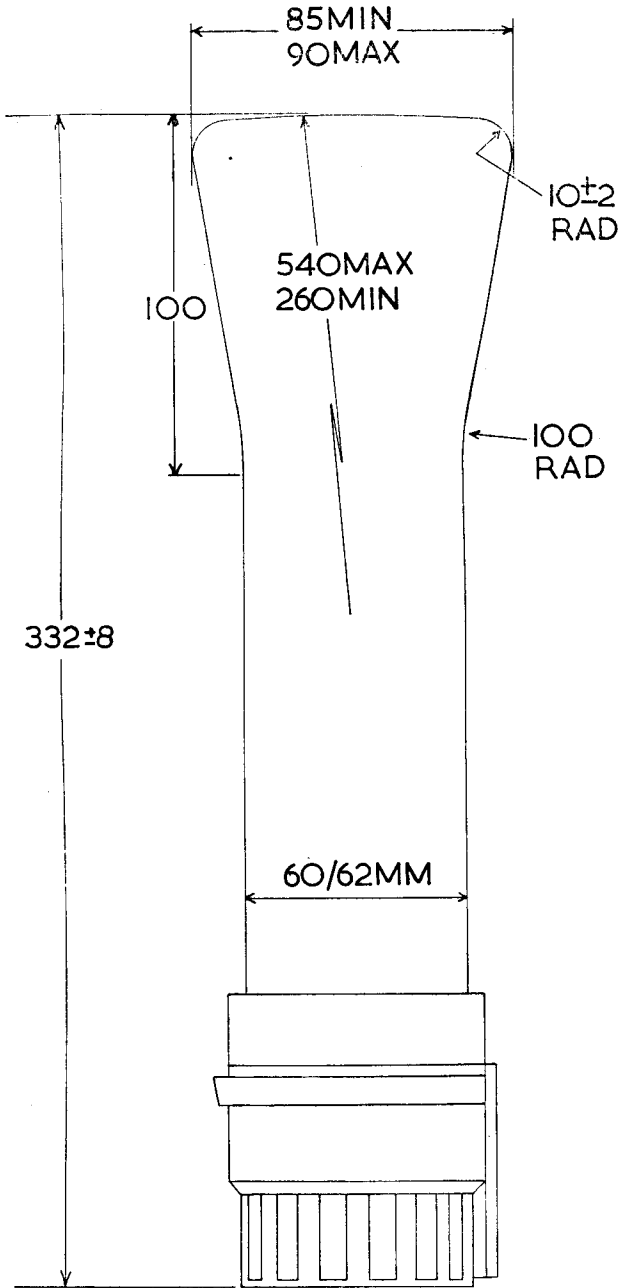
Typical Operating Conditions :

Anode 1	2000 volts.	2000 volts.
Anode 2	700 volts.	350 volts.
Anode 3 (5000v. max.)	4000 volts.	2000 volts.
Modulator volts for cut-off		
	-40 to -80 volts.	-40 to -80 volts.

Deflection Sensitivity :	mm/volt.	mm/volt.
X Plate	0.085	0.170
Y Plate	0.190	0.380

Note 2. The angle between the trace produced by X1 and X2 and the trace produced by Y1 and Y2 is $90^\circ \pm 3^\circ$.

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.