DIAMETER 3″ NOMINAL

# 3ED2

# Oscilloscope Tube

ELECTROSTATIC FOCUS. ELECTROSTATIC DEFLECTION.

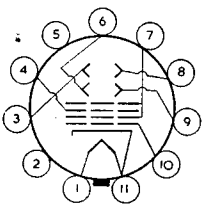
3ED2

## 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 | | 12μμf. |
| Each X Plate to all other electrodes | | 16μμf. |
| Each Y Plate to all other electrodes | | 11μμf. |
| Deflector Plates X1 to X2 | | 2.5μμf. |
| Deflector Plates Y1 to Y2 | | 2.5μμf. |
| Screen: | | |
| Fluorescence | | Blue. |
| Afterglow | | Yellow. |
| Persistence of Afterglow | | Long |
| (10 sec. min./100 sec. max. for 1% initial brightness). | | |
| Focussing Method | | Electrostatic. |
| Deflecting Method | | Electrostatic. |
| Overall Length. | | 292 ±.9 mm. |
| Greatest Diameter of Bulb | | 77.8 mm. |
| Minimum Useful Screen Diameter | | 69.0 mm. |
| Mounting Position | | Any. |
| Base | | 11 Pin Magnal. |

Pin 1—Heater.
Pin 2—No connection.
Pin 3—X1.
Pin 4—Anode 2.
Pin 5—No connection.




Pin 6—Y2.
Pin 7—Anode 1 and 3.
Pin 8—X2.
Pin 9—Y1.
Pin 10—Modulator.
Pin 11—Heater and Cathode.

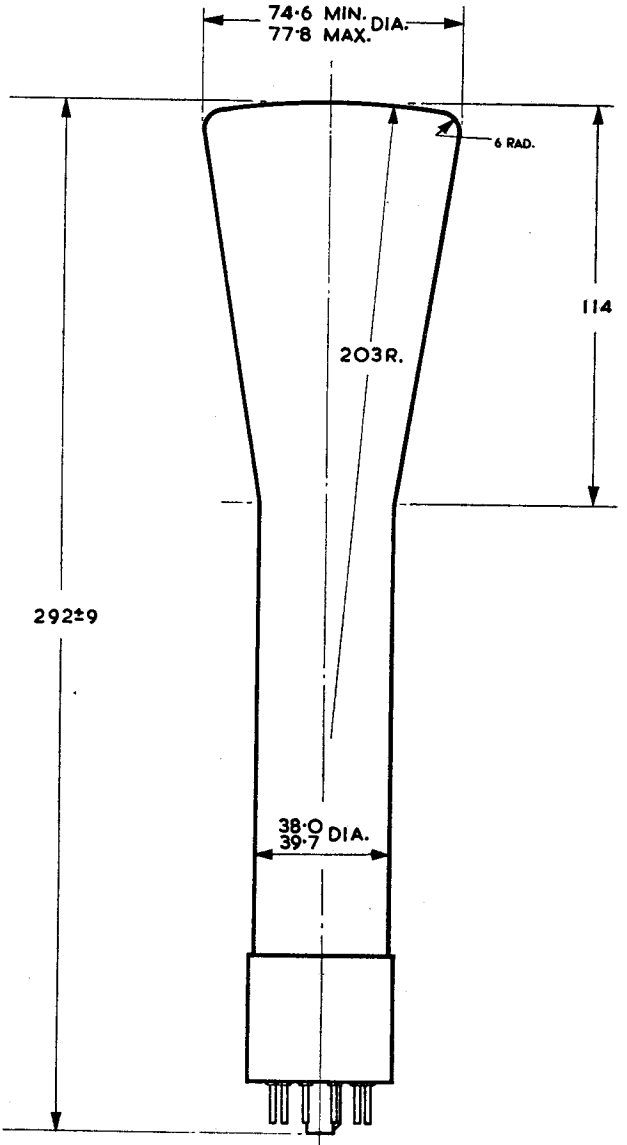
### Typical Operating Conditions:

Anode 1 and 3 (2500 volts max.)

| | 1000 volts | 2000 volts. |
|---|---|---|
| Anode 2 | 200/280 volts | 400/560 volts. |
| Modulator volts for cut-off | −50 volts max. | −100 volts max. |

### Deflection Sensitivity:

| | mm/volt | mm./volt. |
|---|---|---|
| X Plate | 0.26 to 0.4 | 0.13 to 0.2 |
| Y Plate | 0.3 to 0.45 | 0.15 to 0.22 |




ALL SIZES IN MILLIMETRES.

**Note 1.** When viewing the screen with the tube positioned such that the spigot key is uppermost, a positive voltage applied to terminal X1 will deflect the spot to the left and a positive voltage applied to the terminal Y1 will deflect the spot upwards.

**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.** The angle between the trace produced by the deflector plates Y1, Y2 and a plane through the tube axis and Pin No. 6, may vary by an angular tolerance of 10°.