DIAMETER 12″ NOMINAL

12T03A

# 12T03A

# Radar Tube

MAGNETIC FOCUS. MAGNETIC DEFLECTION

DATA

## GENERAL:

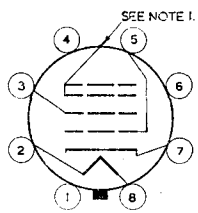
| | | |
|---|---|---|
| Heater: Voltage | 6.3 | a.c. or d.c. volts. |
| Current | 0.6 | amp. |
| Direct Inter-electrode Capacitances. | | |
| Modulator to all other electrodes | | 9.0μμf. |
| Anode 1 to all other electrodes | | 6.0μμf. |
| Cathode to all other electrodes | | 8.0μμf. |
| Screen : | | Aluminium Backed. |
| Fluorescence | | Orange. |
| Afterglow | | Orange. |
| Persistence of Afterglow | | Long. |
| Focusing Method | | Magnetic. |
| Deflecting Method | | Magnetic. |
| Overall Length | | 488 ± 7 mm. |
| Greatest Diameter of Bulb | | 306.5 mm. |
| Minimum Useful Screen Diameter | | 265 mm. |
| Mounting Position | | Any. |
| Anode Cap | | Cavity Cap BSS448/CT8. |
| Base | | International Octal. |

Pin 1—No connection.

Pin 2—Heater.

Pin 3—Anode 1.

Pin 4—No connection.




Pin 5—Modulator.

Pin 6—No connection.

Pin 7—Cathode.

Pin 8—Heater.

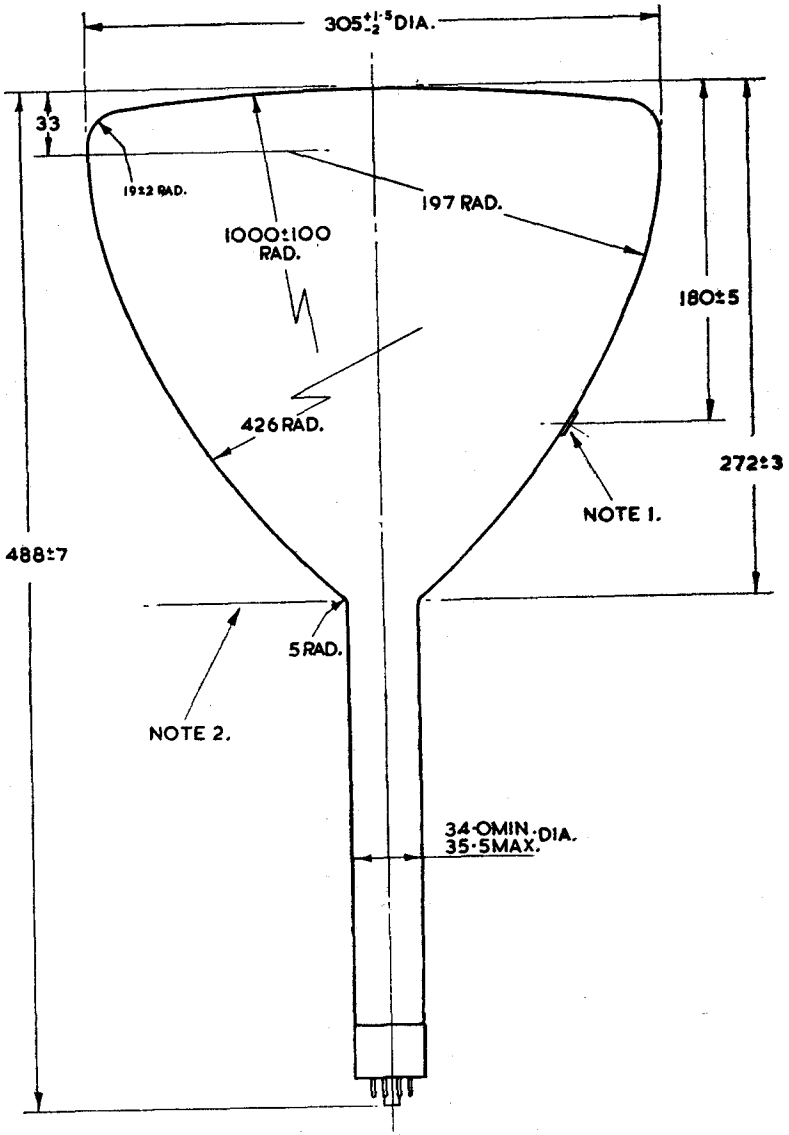
Cap—Final Anode.

## Maximum Ratings:

| | |
|---|---|
| Final Anode Voltage | 15000 volts. |
| Anode 1 Voltage | 850 volts. |
| Modulator Voltage : | |
| Negative bias value | 140 volts. |
| Positive bias value | 0 volts. |
| Peak Heater-Cathode Voltages : | |
| Heater negative with respect to cathode | 150 volts. |
| Heater positive with respect to cathode | 150 volts. |

## Typical Operating Conditions:

| | |
|---|---|
| Final Anode Voltage | 10000 volts. |
| Anode 1 Voltage | 700 volts. |
| Modulator Voltage for cut-off | −50 to −115 volts. |
| Focusing-Coil Current–See Note 3 | 700 A.T. |
| Spot Position . . See Note 4 | |




ALL SIZES IN MILLIMETRES.

**Note 1.** The plane through the tube axis and Pin No. 5 may vary from the plane through the tube axis and anode terminal by an angular tolerance (measured about the tube axis) of 10°. Anode terminal is on the same side of the tube as Pin No. 5.

**Note 2.** Reference line is determined by position where gauge 36 mm. I.D. and 50 mm. long will rest on the bulb cone.

**Note 3.** Focusing Coil positioned with centre line of air gap approximately 100 mm. form the reference line (see outline drawing).

**Note 4.** The centre of the undeflected focused spot will fall within a circle having 12 mm. radius concentric with the centre of the tube face.