

# 12L03A Radar Tube

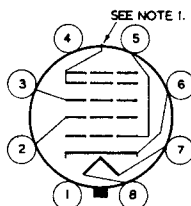
ELECTROSTATIC FOCUS.      MAGNETIC DEFLECTION

## 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 . . . . .	15 $\mu$ f.	
Anode 1 to all other electrodes . . . . .	15 $\mu$ f.	
Cathode to all other electrodes . . . . .	12 $\mu$ f.	
Screen : . . . . .	Aluminium Backed.	
Fluorescence . . . . .	Orange.	
Afterglow . . . . .	Orange.	
Persistence of Afterglow . . . . .	Long.	
Focusing Method . . . . .	Electrostatic.	
Deflecting Method . . . . .	Magnetic.	
Overall Length . . . . .	535 $\pm$ 10 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—Anode 1.  
Pin 3—Anode 2.  
Pin 4—No connection.



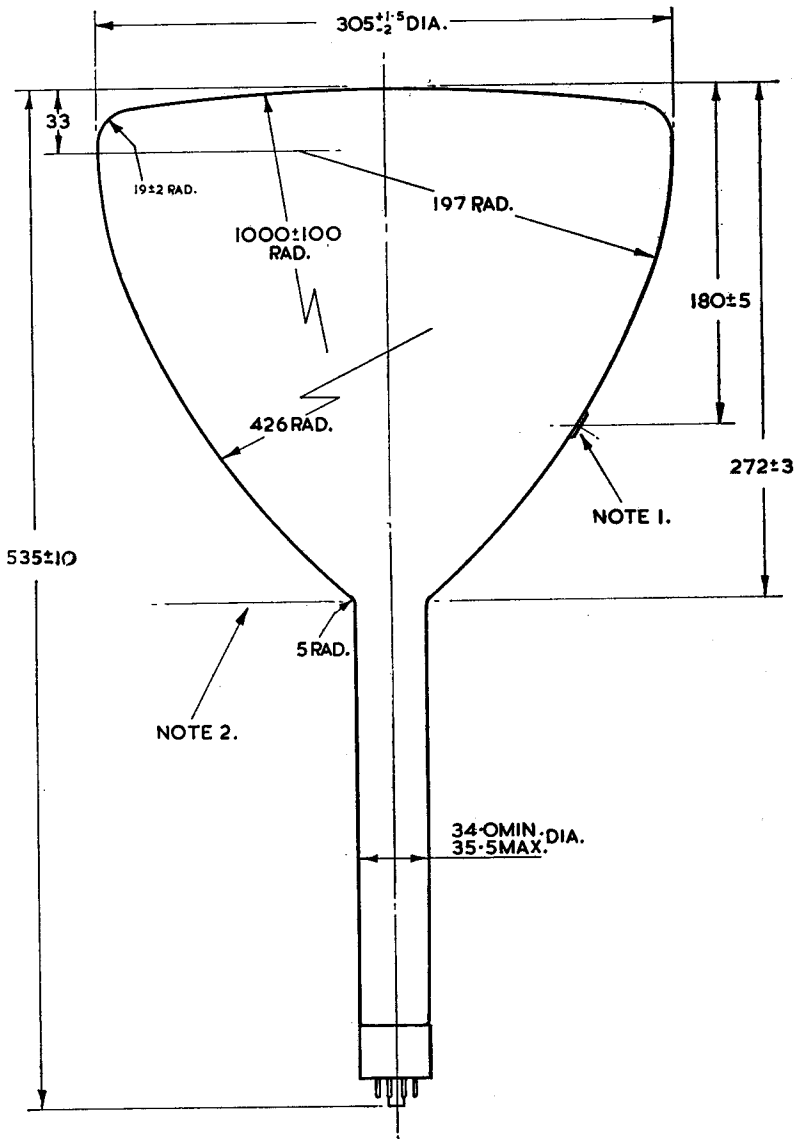
- Pin 5—Modulator.  
Pin 6—Cathode.  
Pin 7—Heater.  
Pin 8—Heater.  
Cap—Final Anode.

**Maximum Ratings :**

Final Anode Voltage . . . . .	13000 volts.
Anode 1 Voltage . . . . .	2200 volts.
Modulator Voltage :	
Negative bias value . . . . .	130 volts.
Positive bias value . . . . .	0 volts.
Peak Heater-Cathode Voltages :	
Heater negative with respect to cathode . . . . .	125 volts.
Heater positive with respect to cathode . . . . .	125 volts.

**Typical Operating Conditions :**

Final Anode Voltage . . . . .	12000 volts.
Anode 2 Voltage . . . . .	1900 volts. $\pm$ 100 volts.
Anode 1 Voltage—See Note 3 . . . . .	2000 volts.
Modulator Voltage for cut-off . . . . .	-70 to -120 volts.
Spot Position . . . . .	See Note 4



ALL SIZES IN MILLIMETRES.

- Note 1. The plane through the tube axis and the spigot key may vary from the plane through the tube axis and the anode cap by an angular tolerance (measured about the tube axis) of  $10^\circ$ . The anode cap is on the same side of the tube as the spigot key.
- Note 2. Reference line is determined by position where a gauge 36 mm. I.D. and 50 mm. long will rest on the bulb cone.
- Note 3. Anode 1 must always be at least 50 volts positive to Anode 2.
- Note 4. The centre of the undeflected focused spot will fall within a circle having a 10 mm. radius concentric with the centre of the tube face.