



# Triode Type BR 155

VHF AMPLIFIER AND OSCILLATOR

**General.** The BR 155 is a forced-air-cooled transmitting triode fitted with a tungsten filament.

**Filament Starting.** The cold filament resistance is approximately  $0.01 \Omega$ . The filament current must not exceed 195 A at any time during the switching-on period.

**Cooling.** The anode requires forced air cooling. The air cooling and air flow characteristics given show air inlet temperature  $^{\circ}\text{C}/\text{anode} + \text{grid loss}$ ; and air flow/air pressure.

The external grid and filament seals also require air cooling. The volume of air necessary will be approximately 10 cu. ft. per minute and should be directed vertically downwards on to the seals through a 1-in. nozzle.

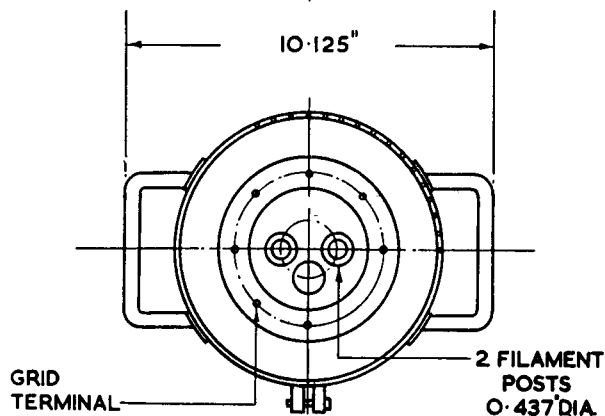
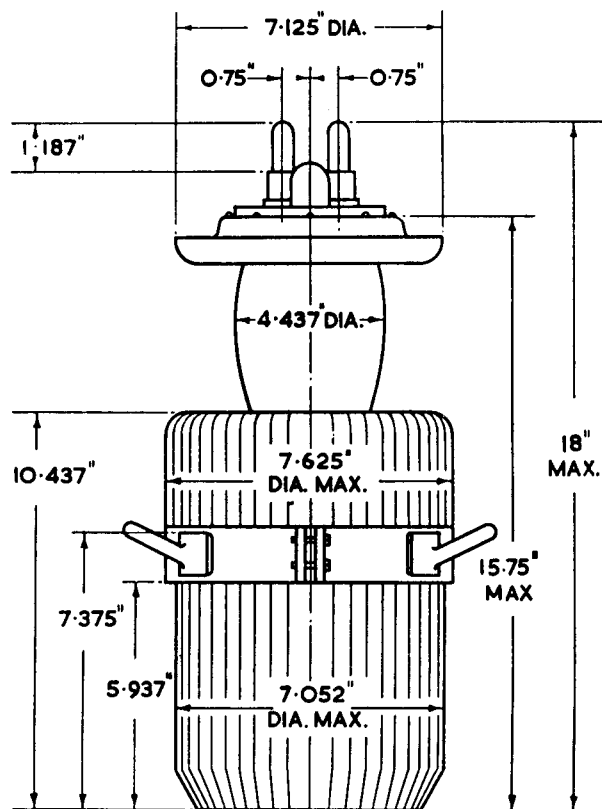
The temperature of the anode and that of the grid and filament seals must not exceed  $180^{\circ}\text{C}$ .

The air flow must be started before the application of any supply voltage and should be continued for at least one minute after the removal of all supply voltages.

## APPROXIMATE DATA

|                             |                                      |      |
|-----------------------------|--------------------------------------|------|
| $V_f$                       | 17                                   | V    |
| $I_f$                       | 130                                  | A    |
| $V_a$ (max)                 | 10                                   | kV   |
| 1. Class C RF Amplifier     |                                      |      |
| 2. Class C RF Amplifier     |                                      |      |
| Anode modulated             |                                      |      |
|                             | 8                                    | kV   |
| $P_a$ (max)                 | 7.5                                  | kW   |
| $P_{gl}$ (max)              | 0.35                                 | kW   |
| $\mu$                       | } taken at $V_a$ 5 kV, $I_a$ 1.5 A { |      |
| $g_m$                       |                                      |      |
| $f$ (max) (at full ratings) |                                      |      |
|                             | 100                                  | Mc/s |
| $C_{a-gl}$                  | 31                                   | pF   |
| $C_{a-k}$                   | 3                                    | pF   |
| $C_{gl-k}$                  | 44.5                                 | pF   |

**Marked Voltage.** Each valve is marked with the filament voltage required to give 14 A peak emission at 90% saturation.



WEIGHT 28 lb. (12.7 kg.)

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