



# Triode Type BR 195

(VHF AMPLIFIER)

**General.** The BR 195 is a forced air-cooled transmitting triode fitted with a thoriated tungsten filament. The valve is designed to operate at full ratings at frequencies up to 220 Mc/s.

**Cooling.** The anode requires forced air cooling. The air cooling and air flow characteristics given show the air inlet temperature °C/anode+grid loss; and air flow/air pressure. The temperature of the anode must not exceed 140°C.

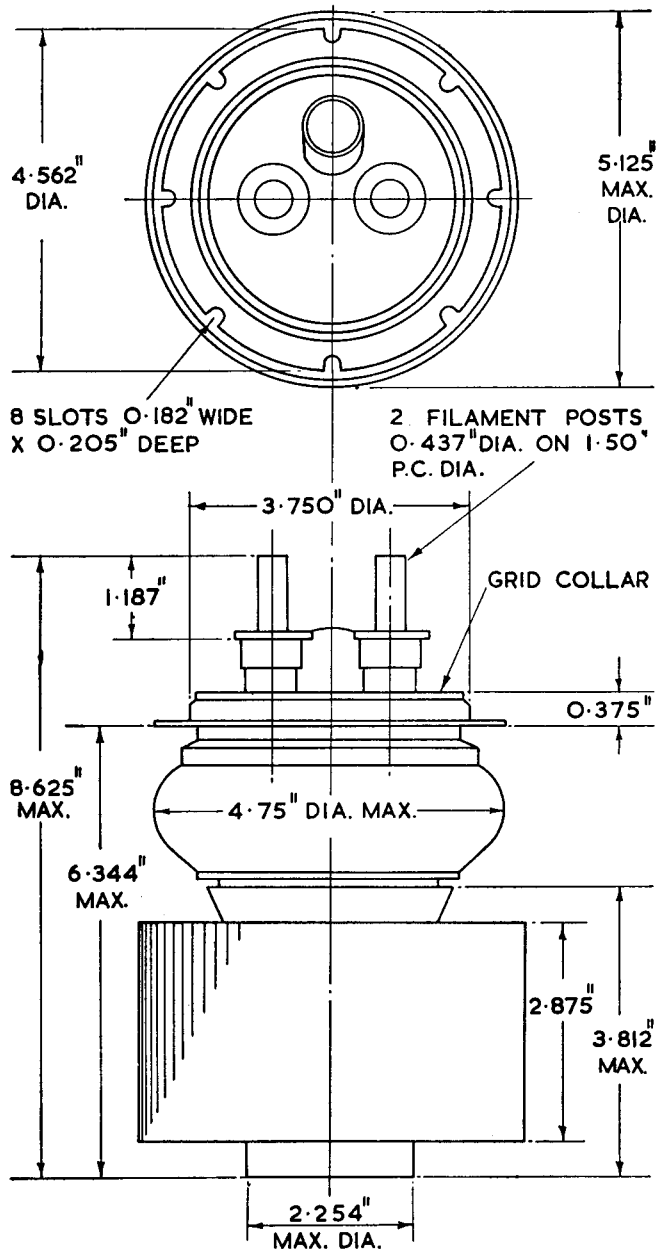
The external grid and filament seals also require air cooling. The volume of air necessary is approximately 10 cu. ft. per minute and should be directed on to the seals from above through a 1-in. nozzle. The temperature of the seals must not exceed 140°C.

**Filament Starting.** The filament current must not exceed 100 A, even momentarily, at any time. The cold filament resistance is approximately 0.0095Ω.

## APPROXIMATE DATA

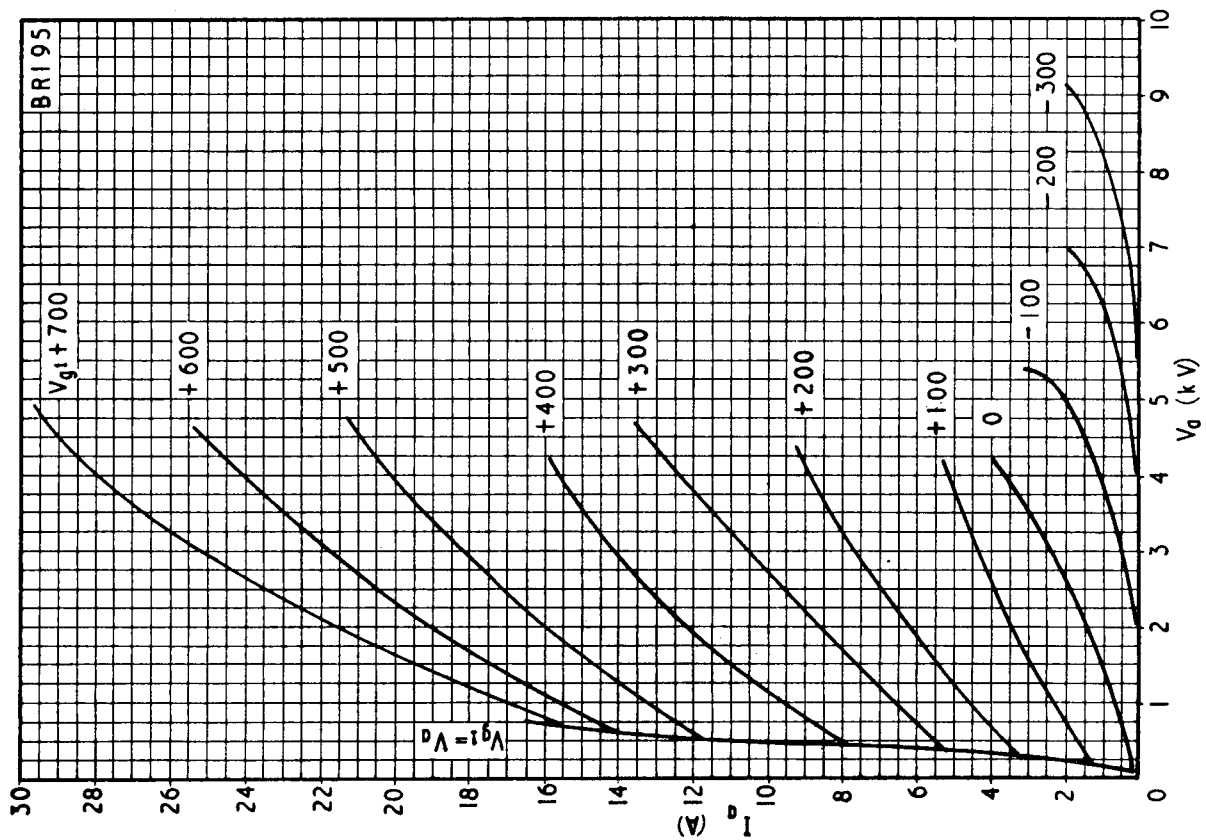
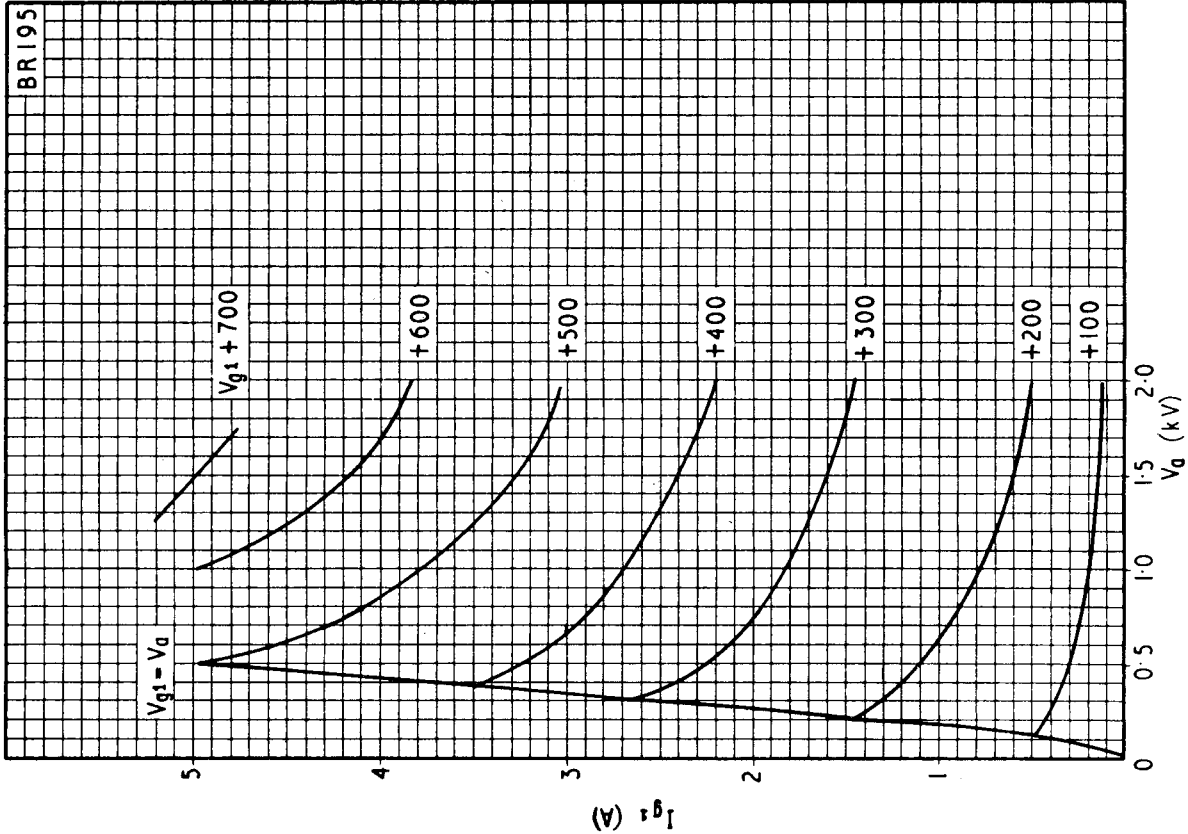
|                       |                                                                                                             |          |
|-----------------------|-------------------------------------------------------------------------------------------------------------|----------|
| $V_f$                 | 6                                                                                                           | $V^*$    |
| $I_f$                 | 67                                                                                                          | A        |
| $V_{a(max)}$          | 5                                                                                                           | kV       |
| $P_{a(max)}$          | 4                                                                                                           | kW       |
| $P_{gl(max)}$         | 0.25                                                                                                        | kW       |
| $\mu$                 | $\left. \begin{array}{l} \text{taken at} \\ V_a \text{ 2.5 kV } I_a \text{ 1A} \end{array} \right\} 25$     |          |
| $g_m$                 |                                                                                                             |          |
|                       | $\left. \begin{array}{l} \text{taken at} \\ V_a \text{ 2.5 kV } I_a \text{ 1.125A} \end{array} \right\} 18$ |          |
| $f$ (at full ratings) |                                                                                                             | 220 Mc/s |
| $C_{a-gl}$            | 16.5                                                                                                        | pF       |
| $C_{a-f}$             | 0.5                                                                                                         | pF       |
| $C_{gl-f}$            | 26.5                                                                                                        | pF       |

\*The valve must be operated at the stated filament voltage.

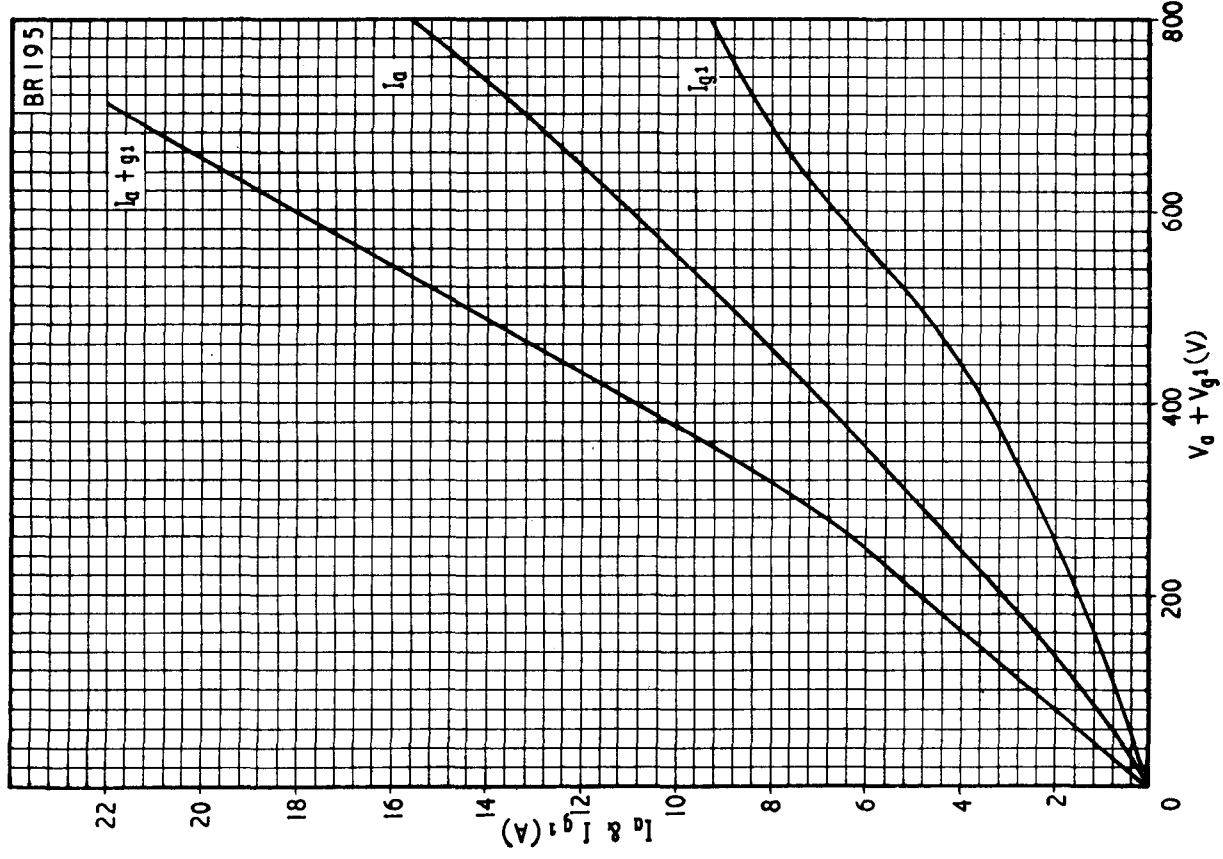


MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

Head Office: Marconi House, Chelmsford, England. Telephone: Chelmsford 3221. Telegraphic Address: Expanse, Chelmsford



BR 195



BR 195

