



# Triode Type BR 161

HF AMPLIFIER AND OSCILLATOR

**General.** The BR 161 is a forced-air-cooled transmitting triode fitted with a thoriated tungsten filament.

**Cooling.** The anode requires forced air cooling. The air flow and air cooling characteristics given show air inlet temperature °C/anode + grid loss; and air flow/air pressure, for the conditions of suction air cooling.

The external grid and filament seals also require air cooling. The volume of air necessary is approximately 20 cu. ft. per minute and should be directed on to the seals from above through a 1-in. nozzle.

The temperature of the anode must not exceed 180°C and that of the grid and filament seals must not exceed 140°C.

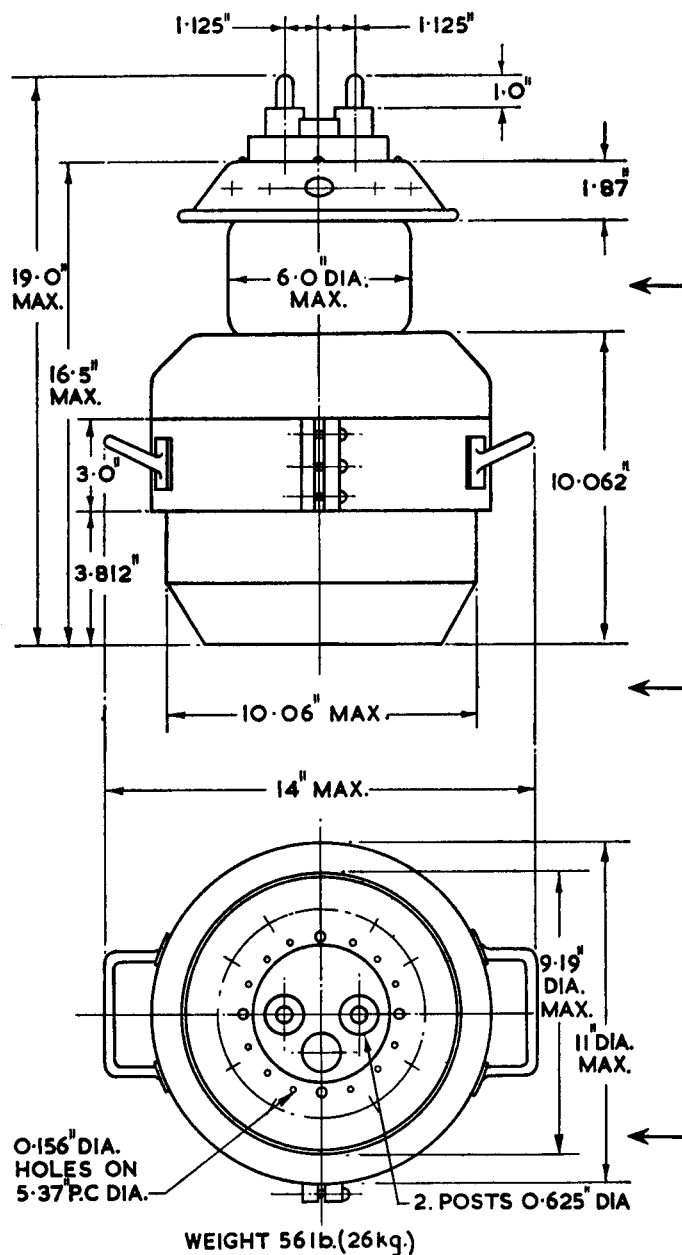
The air flow must be started before the application of any supply voltage and should be continued, for at least one minute, after the removal of all supply voltages.

**Filament Starting.** The cold filament resistance is approximately 0.0055 Ω. The filament current must not exceed 450 A at any time during the switching-on period.

## APPROXIMATE DATA

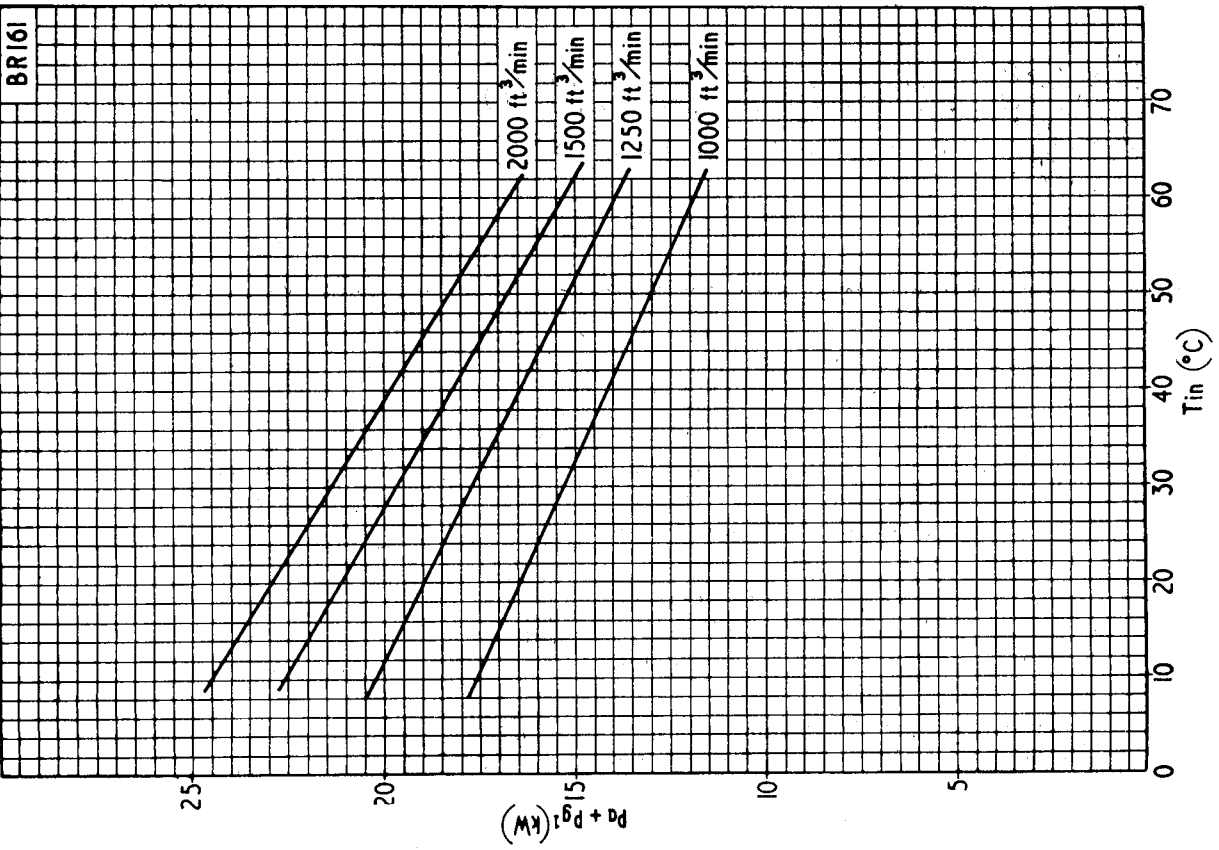
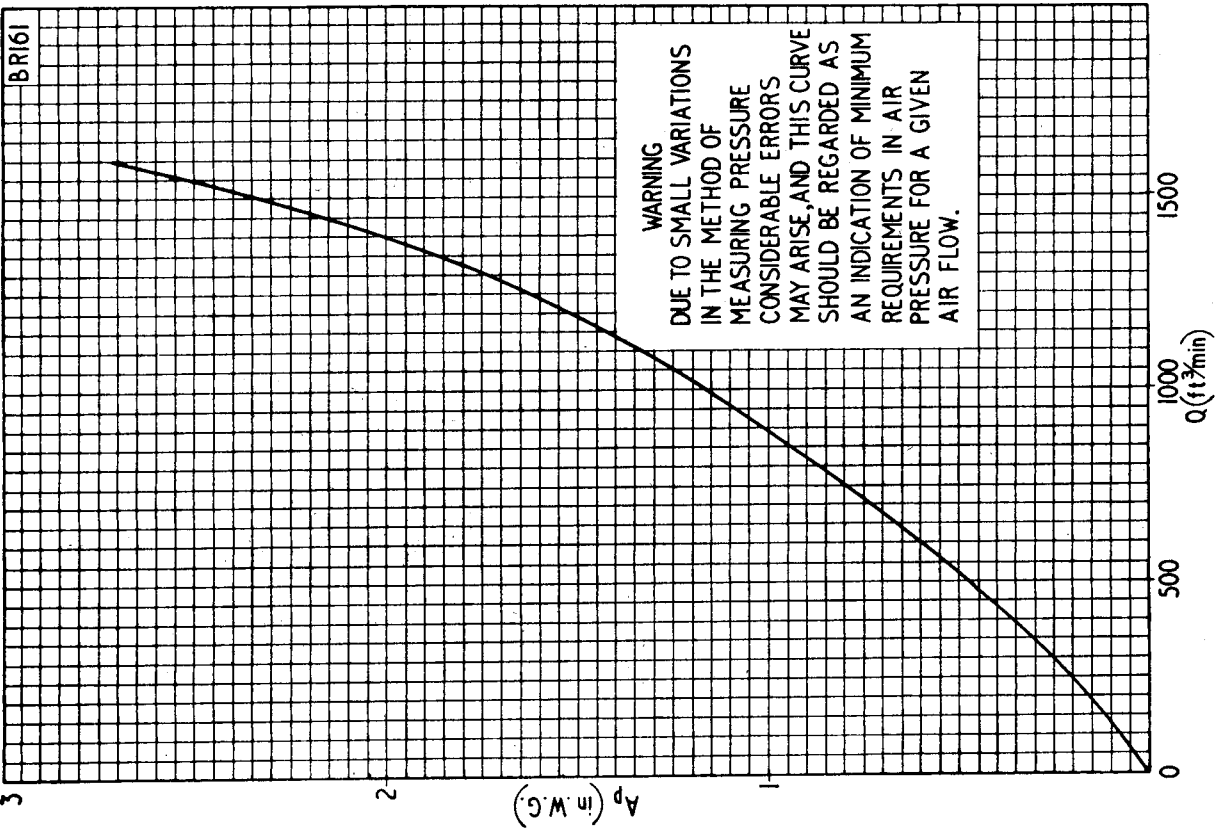
$V_f$	9	V*
$I_f$	175	A
$V_a$ (max)	12	kV
$P_a$ (max)	15	kW
$P_{g1}$ (max)	1	kW
$\mu$	} taken at $V_a$ 9 kV, $I_a$ 1.2 A {	45
$g_m$		23
$I_k$ (pk)	45	A
$f$ (max) (at full ratings)	50	Mc/s
$C_{a-g1}$	36	pF
$C_{a-k}$	1.5	pF
$C_{g1-k}$	57	pF

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

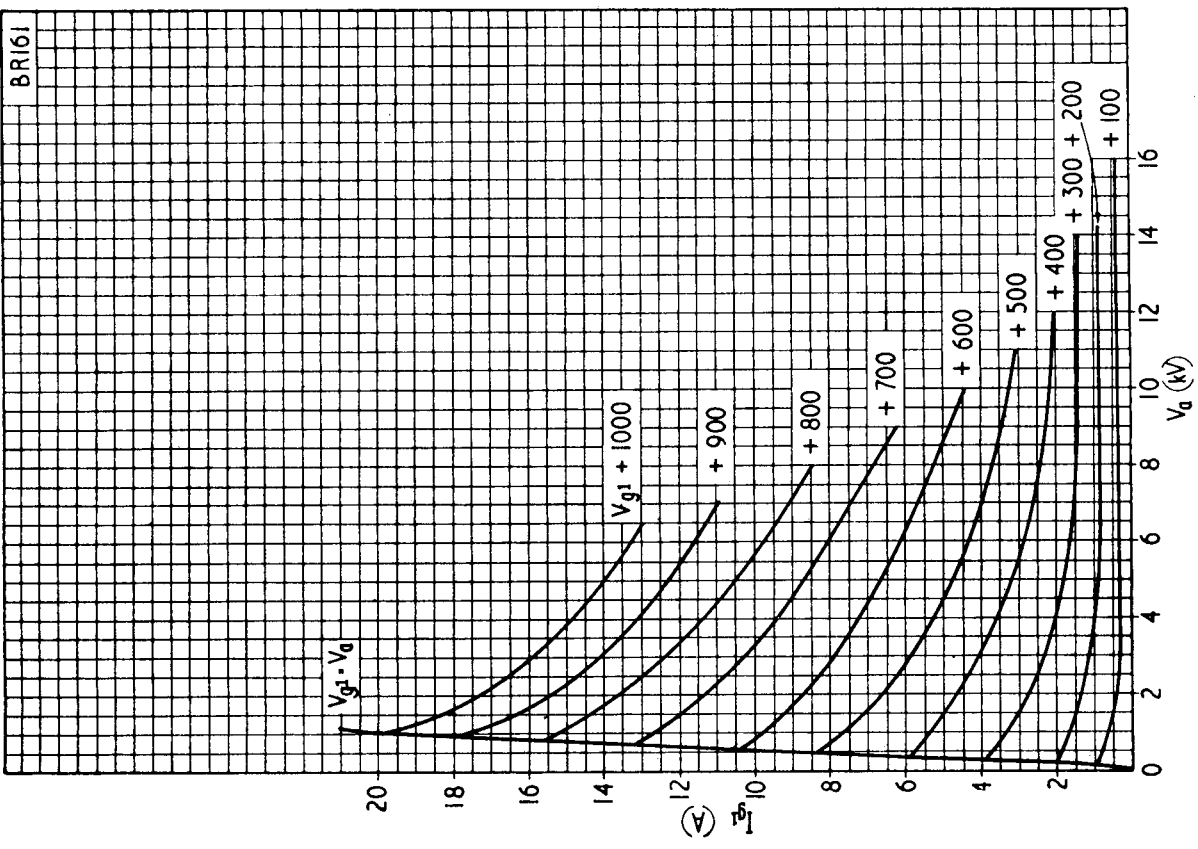


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