



Triode Type BR 194

HF AMPLIFIER AND OSCILLATOR

General. The BR 194 is an air-cooled transmitting triode fitted with a thoriated tungsten filament.

Cooling. The anode, which forms part of the valve envelope, is fitted into a radiator for forced air cooling. The valve is used in conjunction with a special air duct to give the correct air distribution through the radiator. The volume of air necessary is approximately 2,100 cu. ft./min. at a pressure equal to an 8-in. head of water. The temperature of the anode must not exceed 180°C.

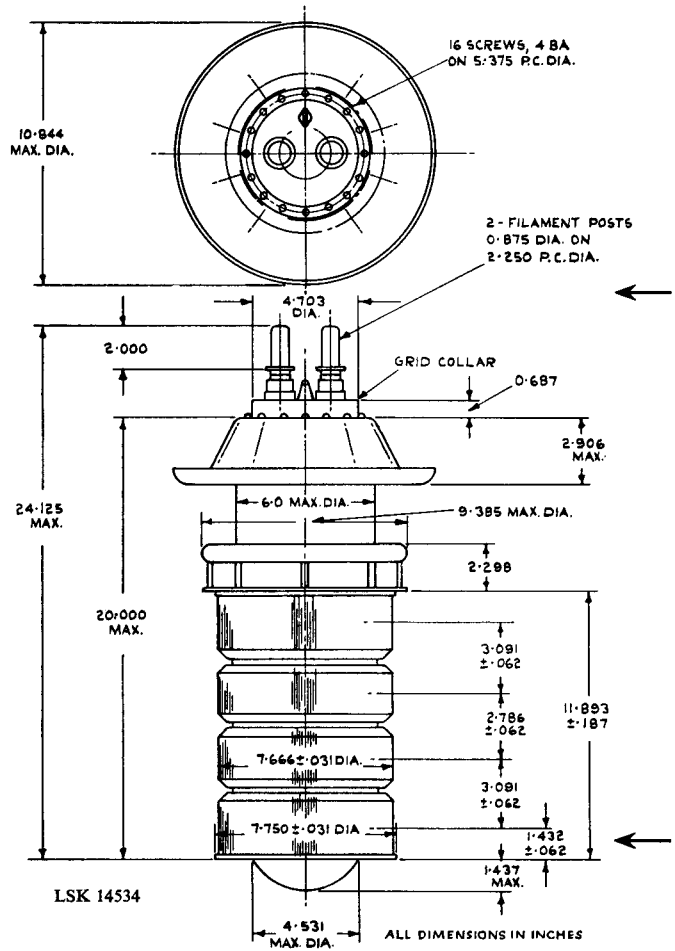
The external grid and filament seals also require air cooling. The volume of air necessary being approximately 20 cu. ft. per minute, and should be directed vertically downwards on to the valve through a 1 in. nozzle. The temperature of the seals must not exceed 140°C.

Filament Starting. The filament current must not exceed 600 A, even momentarily, at any time.

APPROXIMATE DATA

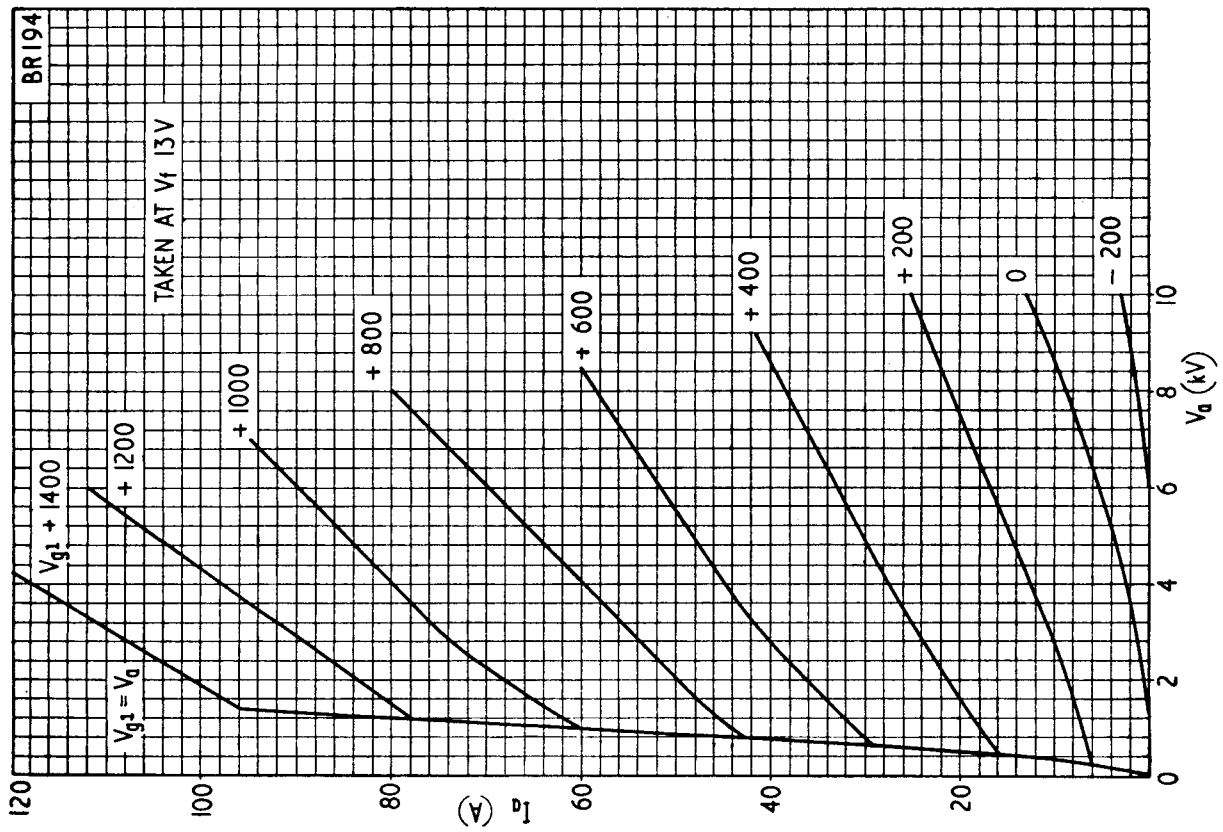
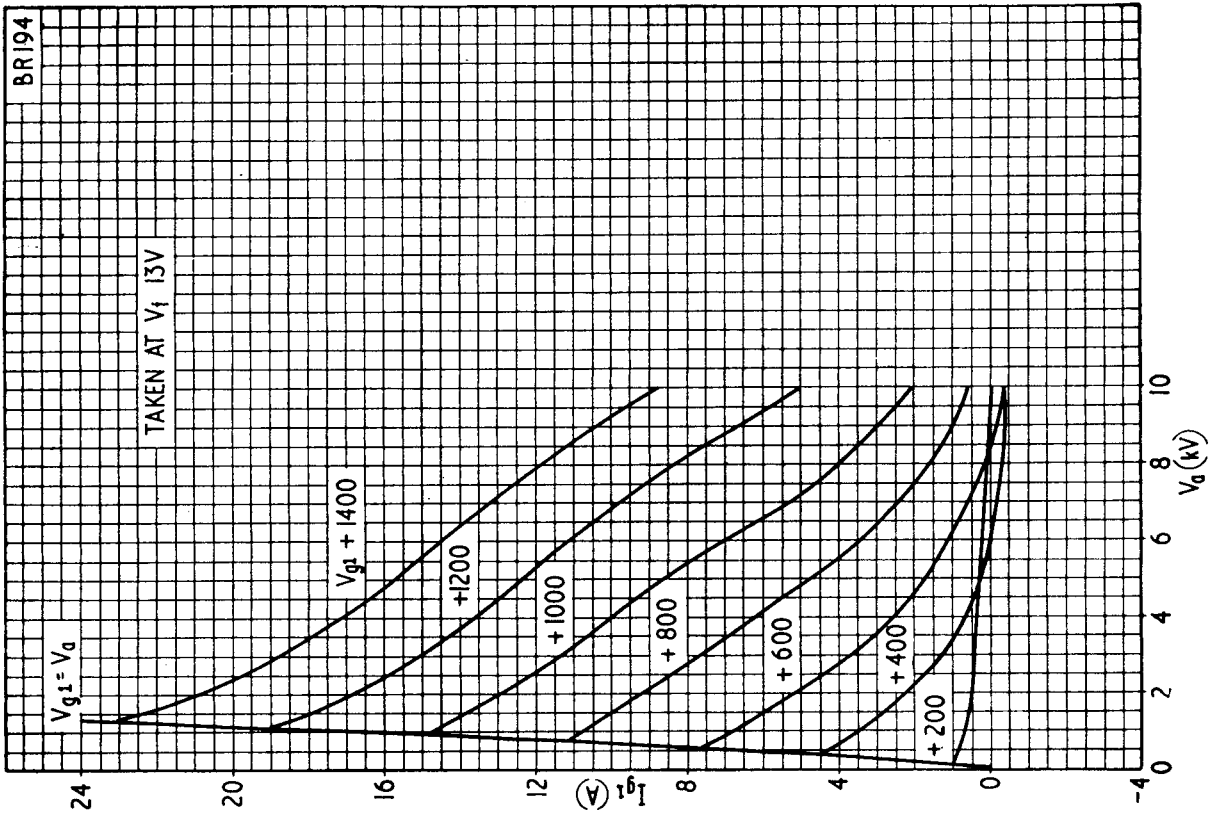
V_f	13	V*
I_f	240	A
I_k (pk)	100	A
V_a (max)	15	kV
V_a (max) (100% mod)	12	kV
P_a (max)	40	kW
P_{g1} (max)	1.8	kW
μ	} taken at V_a 9 kV I_a 3.5 A {	34
g_m		38
f (max)	25	Mc/s
C_{g1-k}	95	pF
C_{a-g1}	60	pF
C_{a-k}	1.5	pF

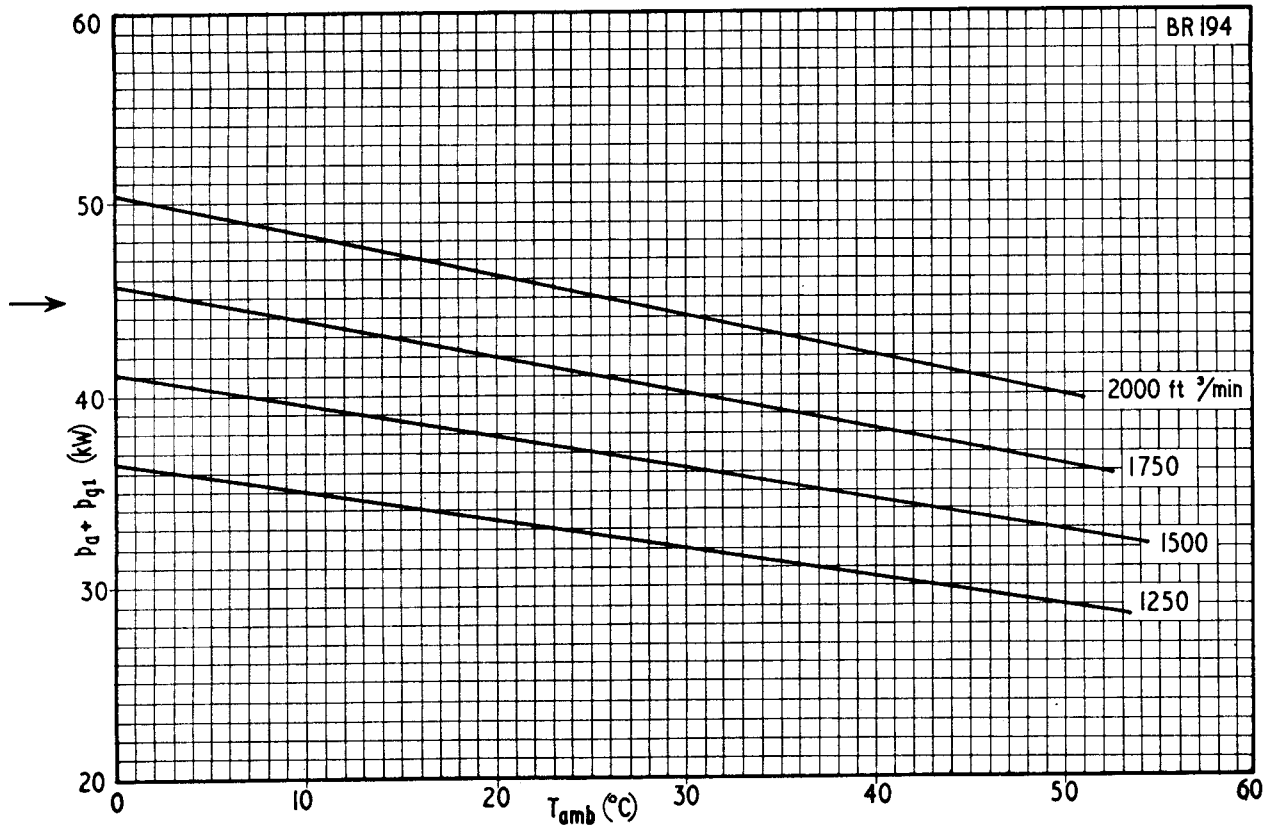
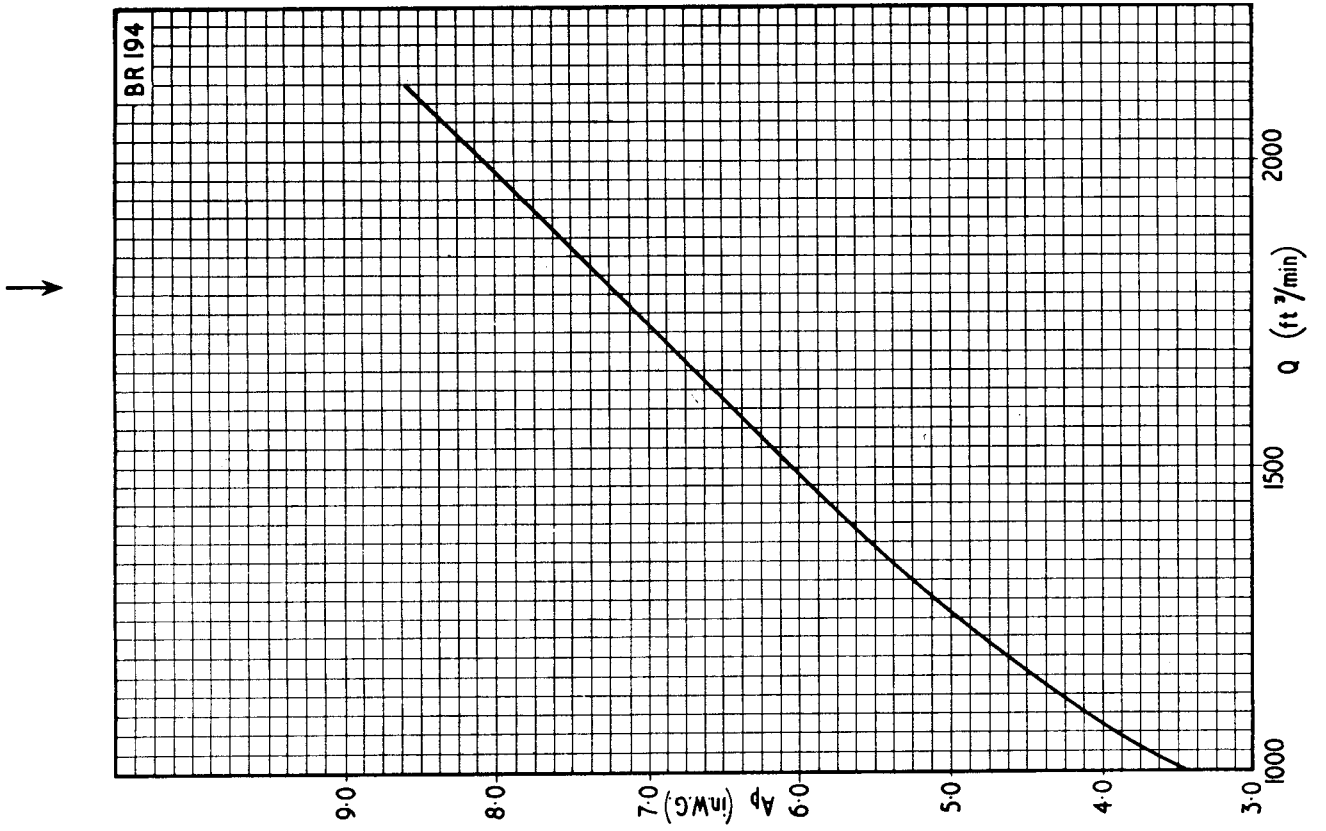
* This valve must be operated at the stated filament voltage.



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TAKEN AT V_f 13V

