

—Standard Valves—

4081-A
Valve

4081-A VALVE

SINGLE ENDED WATER COOLED TRIODE.

SPECIFICATION.

Cathode.

Pure tungsten filament.
Constant voltage type.

Dimensions.

Max. overall length $23\frac{3}{4}$ " (60.2 cms.)
Bulb diameter 5" (12.7 cms.)

Water Jacket.

Type PL 122.676.

Water Circulation.

Normal water flow—11 gallons per minute
(50 litres per minute).

Pressure drop for normal flow—14 lbs. per
sq. in. (1.0 Kg. per sq. cm.)

Maximum water pressure—50 lbs. per sq. in.
(3.5 Kg. per sq. cm.)

Constants.

Filament voltage 20 volts
(exact filament voltage marked
on bulb)

Nominal filament current 59 amps.

Total emission 7.5 amps.

*Amplification factor 33

*Impedance 6,000 ohms

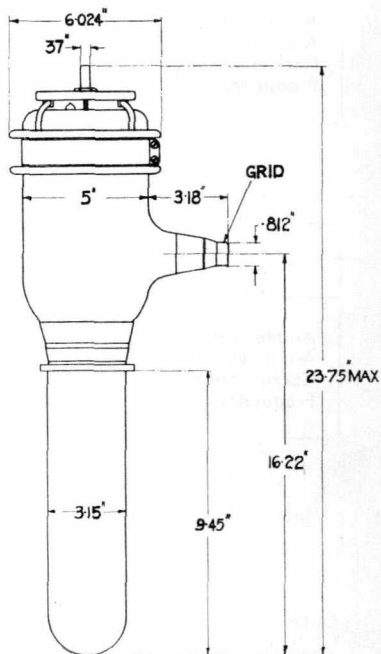
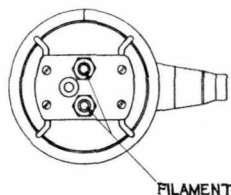
*Mutual conductance 5.5 mA. per volt

Grid-anode capacity 18.6 $\mu\mu\text{F}$.

Grid-filament capacity 18.4 $\mu\mu\text{F}$.

Anode-filament capacity 3.8 $\mu\mu\text{F}$.

* $V_p = 16,000$ volts, $I_p = 1.0$ amp.



LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	17,500 volts
Maximum anode dissipation	20 kW.
Maximum grid dissipation	1.2 kW.
Maximum frequency for above ratings	5 Mc.

Tentative data.

V.4081-A.1
Sept., 1938

—Standard Valves—

TYPICAL OPERATING CONDITIONS.

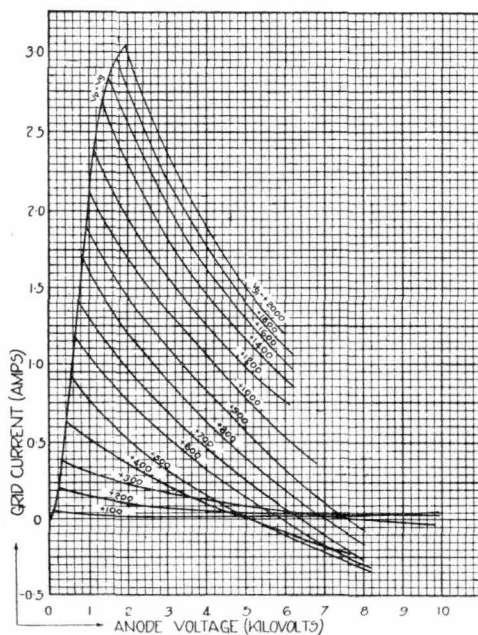
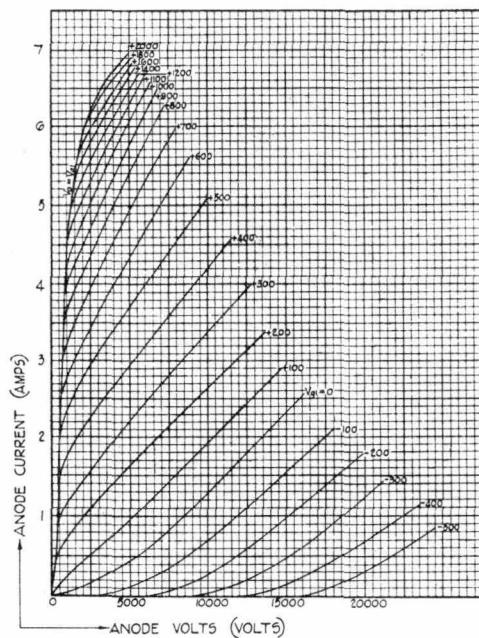
	Class B. A.F. Amp or Mod.
Anode voltage Anode current Power output	17,500 volts 1.05 amps. 11 kW.

	Class B Telephony Modulated carrier applied to grid.		
Anode voltage Anode current Carrier output Frequency	17,500 0.83 5 5	15,000 0.83 3.75 25	13,000 volts 0.83 amps. 2.75 kW. 50 Mc.

	Class C Telephony Subject to anode modulation.		
Anode voltage Anode current Carrier output Frequency	12,500 0.83 6.75 5	10,600 0.83 5.25 25	9,100 volts 0.83 amps. 3.75 kW. 50 Mc.

—Standard Valves—

4081-A
Valve



Tentative data.

V.4081-A.2
Sept. 1938

PRINTED IN
ENGLAND