

—Standard Valves—

4094-A
Valve

4094-A VALVE

TRIODE.

This valve is similar to the 4012-A valve but employs a thoriated tungsten filament, molybdenum anode and hard glass bulb.

SPECIFICATION.

Cathode.

Thoriated tungsten filament.
Constant voltage type.

Base.

Large 4-pin bayonet.

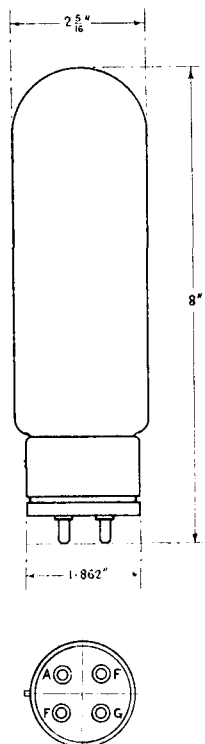
Dimensions.

Maximum overall length 8" (20.4 cms.)
Maximum bulb diameter $2\frac{5}{16}$ " (5.9 cms.)
Net weight 0.36 lb. (164 gms.)

Constants.

Filament voltage	10 volts
Nominal filament current	3.25 amps.
Total emission	1.5 amps.
* Impedance	9,300 ohms.
* Amplification factor	37
* Mutual conductance	4 mA. per volt.
Anode-grid capacity	14 $\mu\mu\text{F}$.
Grid-filament capacity	9 $\mu\mu\text{F}$.
Anode-filament capacity	4 $\mu\mu\text{F}$.

* at $V_p = 1,000$ volts, $I_p = 30$ mA.



LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	1,250 volts
Maximum direct anode current	0.150 amps.
Maximum anode dissipation	85 watts
Maximum direct grid current	0.050 amps.
Maximum frequency for above ratings	6 Mc.
Maximum anode voltage for frequency of 30 Mc.	600 volts

Note :—This valve should be mounted so that the plane of the filament is vertical.

Tentative data

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TYPICAL OPERATING CONDITIONS.

	Class B. A.F. Amp. and Mod. For balanced 2-valve circuits.	
Direct anode voltage	1,250	1,000 volts
Grid bias (approx.)	—25	—17 volts
Anode current per valve—zero signal	0.030	0.030 amps.
Maximum signal	0.150	0.150 amps.
Anode dissipation	80	70 watts
Load resistance—anode to anode	8,000	6,000 ohms
Maximum output—2 valves	200	160 watts

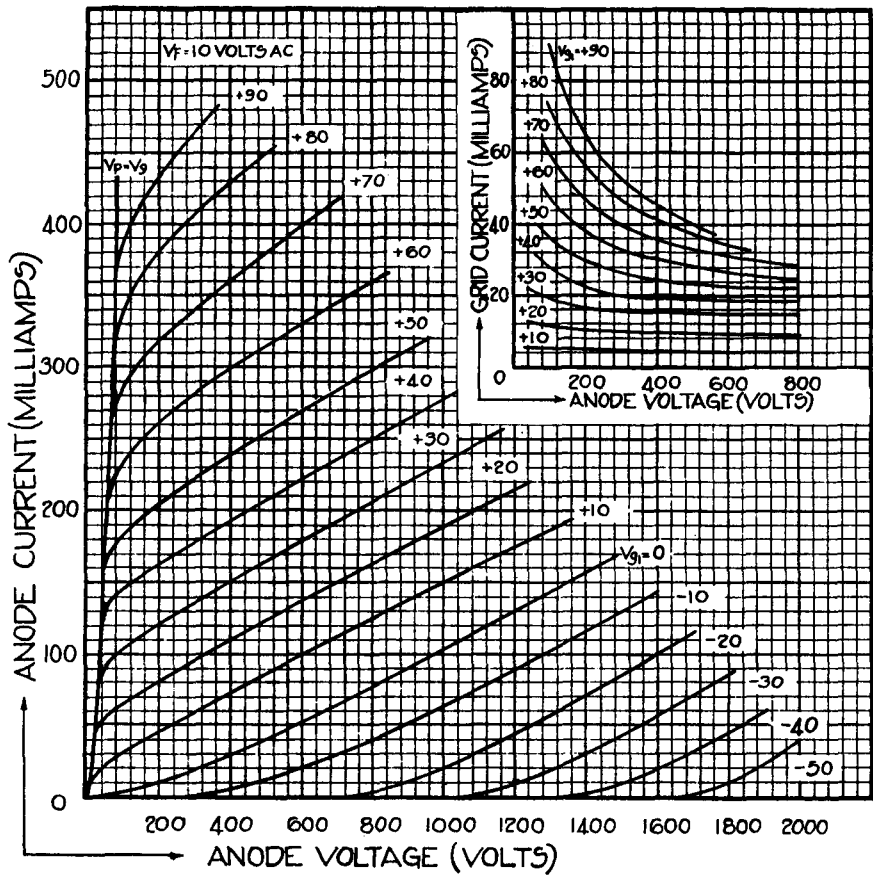
RADIO FREQUENCY OPERATION.

	Class B. Telephony	
	Modulated carrier applied to grid	
Direct anode voltage	1,250	1,000 volts
Direct anode current	0.105	0.130 amps.
Grid bias	—30	—20 volts
Carrier output	45	43 watts
Anode dissipation	85	87 watts

	Class C. Telephony		Class C. Telegraphy	
	Subject to anode modulation		Unmodulated	
Direct anode voltage	1,000	750	1,250	1,000 volts
Direct anode current	0.150	0.130	0.150	0.150 amps.
Grid bias	—60	—40	—70 to —120	—60 to —100 volts
Carrier output	100	65	130	100 watts
Anode dissipation	50	32	57.5	50 watts

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Tentative Data.

V.4094-A.2.
Sept. 1938.

PRINTED IN
ENGLAND