Triode

4242A

CATHODE.

Thoriated tungsten filament.

Voltage	10	V
Nominal current	3.25	A
Peak emission	2	A

RATING.

Amplification factor	Measured at Va—1kV, Vg_1—55 V	12.0	
Impedance		3,000	ohms

DIRECT INTER-ELECTRODE CAPACITIES.

Grid to anode	13	pF
Grid to filament	6.5	pF
Anode to filament	4	pF

DIMENSIONS.

Overall length	204	mm.
Maximum diameter	59	mm.
Base	Large 4-pin bayonet	
Net weight	160	g.

MAXIMUM RATINGS.

Maximum direct anode voltage	1,250	V
Maximum direct anode current	150	mA
Maximum anode dissipation	85	W
Maximum direct grid current	50	mA
Maximum frequency for above rating	6	Mc/s
Maximum anode voltage for frequency of 30 Mc/s	600	V

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

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TYPICAL OPERATING CONDITIONS.
AUDIO FREQUENCY.

Class B. Amplifier or Modulator.
For balanced 2-valve circuits.

Direct anode voltage	1,250	1,000 V
Anode current per valve zero signal	25	25 mA
Anode current per valve maximum signal	150	150 mA
Grid bias	—95	—75 V
Anode dissipation	64	56 W
Load resistance	9,600	8,000 ohms
Peak signal grid to grid	165	140 V
*Approximate grid driving power	4	2 W
Maximum output 2 valves	245	185 W

RADIO FREQUENCY.

Class B. Telephony. Modulated Carrier applied to Grid.
(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	1,250	1,000 V
Grid bias	—100	—80 V
Direct anode current	100	125 mA
*Direct grid current	2	1.5 mA approx.
Peak R.F. grid voltage	112	105 V
Power output	41	40 W

Class C. Amplifier. Anode subjected to modulation.
(Carrier conditions per valve for use with 100% modulation.)

Direct anode voltage	1,000 V max.	750 V
Grid bias	—195	—180 V
Direct anode current	150	150 mA
Peak R.F. grid voltage	295	285 V
*Direct grid current	17	17 mA approx.
Power output	110	80 W

Class C. Amplifier or Oscillator, Unmodulated.

Direct anode voltage	1,250	1,000 V
Grid bias	—153	—133 V
Direct anode current	150	150 mA
Peak R.F. grid voltage	243	223 V
*D.C. grid current	11.5	10 mA approx.
Power output	140	108 W

* Subject to wide variation dependent upon the impedance of the load circuit.

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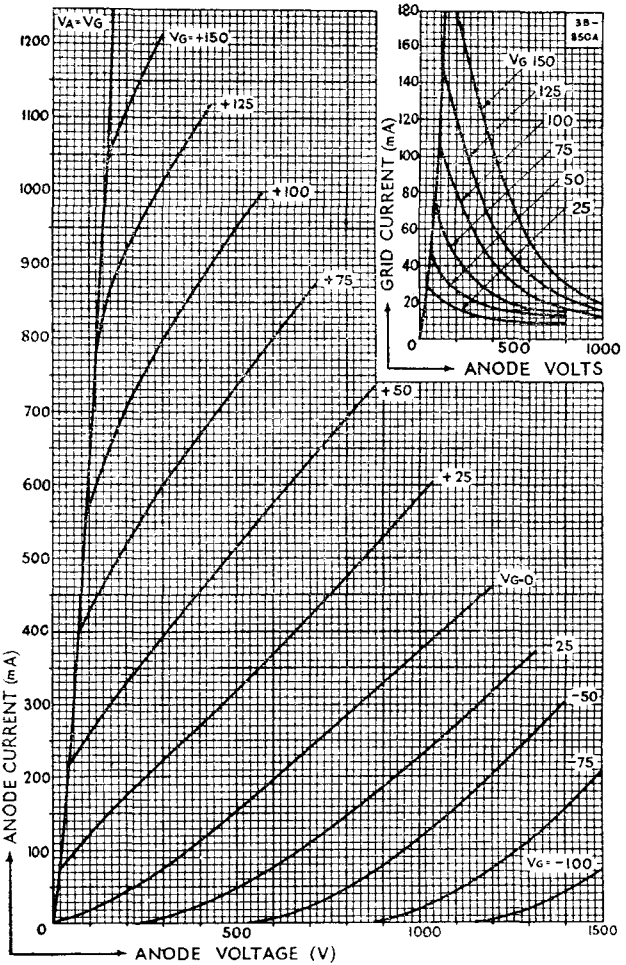

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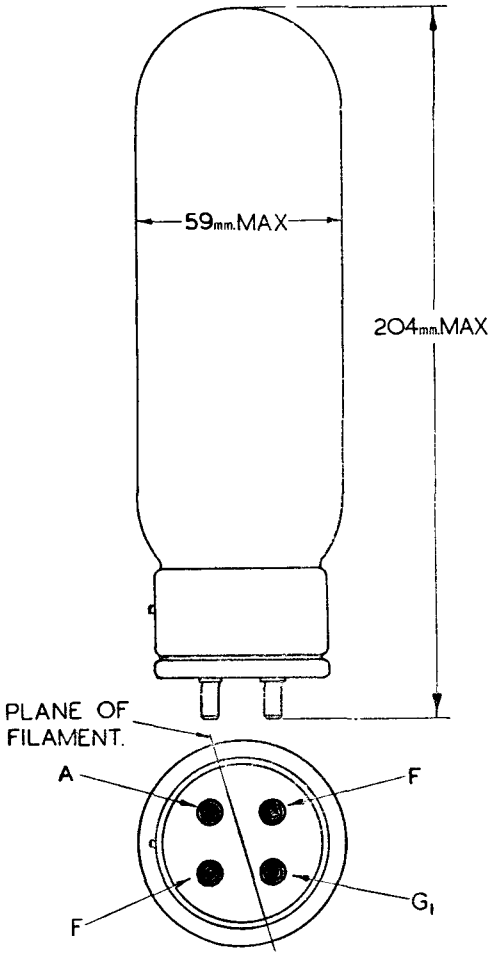
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