Triode

4270A

CATHODE.

Thoriated tungsten filament.

Voltage	10.0	V
Nominal current	9.75	A
Peak emission	4.0	A

RATING.

Amplification factor	Measured at Va 2,500V Ia 120 mA	16
Impedance		2,800 ohms

DIRECT INTER-ELECTRODE CAPACITIES.

Grid to anode	21	pF
Grid to filament	18	pF
Anode to filament	2	pF

DIMENSIONS.

Maximum overall length	433	mm.
Maximum diameter	102	mm.
Base. Special (see sketch)		
Net weight	600	g.

MAXIMUM RATINGS.

Maximum direct anode voltage	3,000	V
Maximum direct anode current	0.375	A
Maximum anode dissipation	350	W
Maximum direct grid current	0.075	A
Maximum frequency for above ratings	7.5	Mc/s.
Maximum anode voltage for frequency 22.5 Mc/s.	1,000	V

It is recommended that the valve be operated in a vertical position. When operated horizontally the plane of the filament must be vertical.

Triode

4270A

TYPICAL OPERATING CONDITIONS.
AUDIO FREQUENCY.

Class A. Amplifier and Modulator.

Direct anode voltage	2,500	2,000 V
Grid bias	—130	—95 V
Direct anode current	0.120	0.150 A
Load impedance	15,000	10,000 ohms
Undistorted output	90	70 W

Class B. Power Amplifier or Modulator.
(For balanced 2-valve operation.)

Direct anode voltage	2,500	2,000 V
Grid bias	—140	—100 V
Anode current per valve—zero signal	60	60 mA
Anode current per valve—maximum signal	375	357 mA
Peak A.F. grid drive voltage grid to grid	480	400 V
Load resistance—anode to anode	7,500	5,700 ohms
*Direct grid current per valve	9	12 mA approx.
Power output for 2 valves	1,200	940 W approx.

RADIO FREQUENCY

Class B. Power Amplifier Telephony.
(Carrier conditions per valve for use with 100% modulation.)

Direct anode voltage	3,000	2,000 V
Grid bias	—186	—155 V
Direct anode current	0.175	0.210 A
*Direct grid current	0	0 mA approx.
Power output	175	180 W

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

Direct anode voltage	2,250	1,750 V
Grid bias	—320	—260 V
Direct anode current	0.300	0.375 A
Peak RF grid voltage	420	380 V
*Direct grid current	12	17 mA approx.
Power output	450	430 W approx.

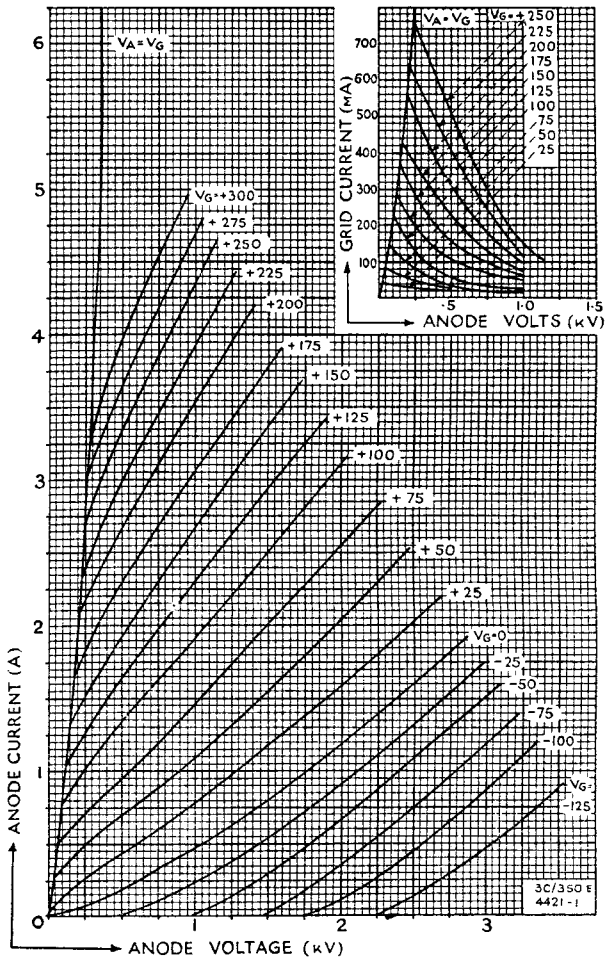
Class C. Power Amplifier or Oscillator, unmodulated.

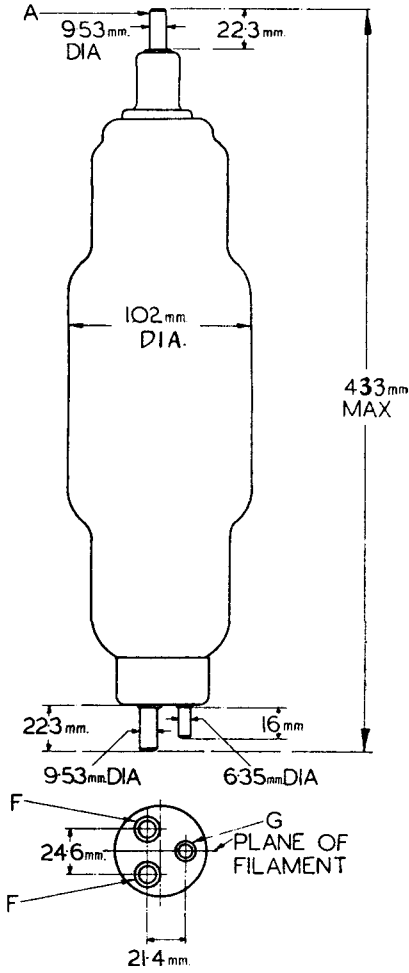
Direct anode voltage	3,000	2,000 V
Grid bias	—270	—200 V
Direct anode current	0.375	0.375 A
Peak R.F. grid voltage	385	335 V
*Direct grid current	10	31 mA approx.
Power output	800	540 W

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

Triode

4270A



Triode

4270A