



# R. F. Triode

For Operation at full input  
rating up to 100 Mc/s

## 4356A

3B/505E  
(4356A)

### CATHODE.

Thoriated tungsten filament

Voltage	5	V
Nominal current	5	A
Peak emission	2	A

### RATING.

Amplification factor	{ Measured at $V_a$ 500 V $I_a$ 100 mA }	45	$\Omega$
Impedance			

### DIRECT INTER-ELECTRODE CAPACITIES.

Grid to anode	2.25	pF
Grid to filament	4.0	pF
Anode to filament	0.9	pF

### DIMENSIONS.

Maximum overall length	133	mm.
Maximum diameter	63.5	mm.
Base		Special
Net weight	100	g.

### MAXIMUM CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	1,500	V
Maximum direct anode current	120	mA
Maximum anode dissipation	50	W
Maximum direct grid current	35	mA
Maximum frequency for above ratings	100	Mc/s
Maximum anode voltage for maximum frequency limit of 250 Mc/s	1,000	V

The valve should be operated in a vertical position and a free circulation of air must be provided to ensure adequate cooling of the bulb. This is of particular importance when two or more valves are used.

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**TYPICAL OPERATING CONDITIONS.**

**RADIO FREQUENCY.**

**Class B Telephony. Modulated Carrier applied to Grid.**

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	1,500	V
Grid bias	-30	V
Direct anode current	50	mA
Peak R.F. grid voltage peak of modulation cycle	145	V
Power output	25	W

**Class C Power Amplifier. Anode subjected to modulation**

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	1,250	V max.
Grid bias	-160	V
Direct anode current	100	mA
Peak R.F. grid voltage	290	V
Power output	88	W

**Class C Power Amplifier or Oscillator, unmodulated.**

Direct anode voltage	1,500	V
Grid bias	-72	V
Direct anode current	100	mA
Peak R.F. grid voltage	190	V
*Direct grid current	22.5	mA
		(approx.)
Power output	100	W

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

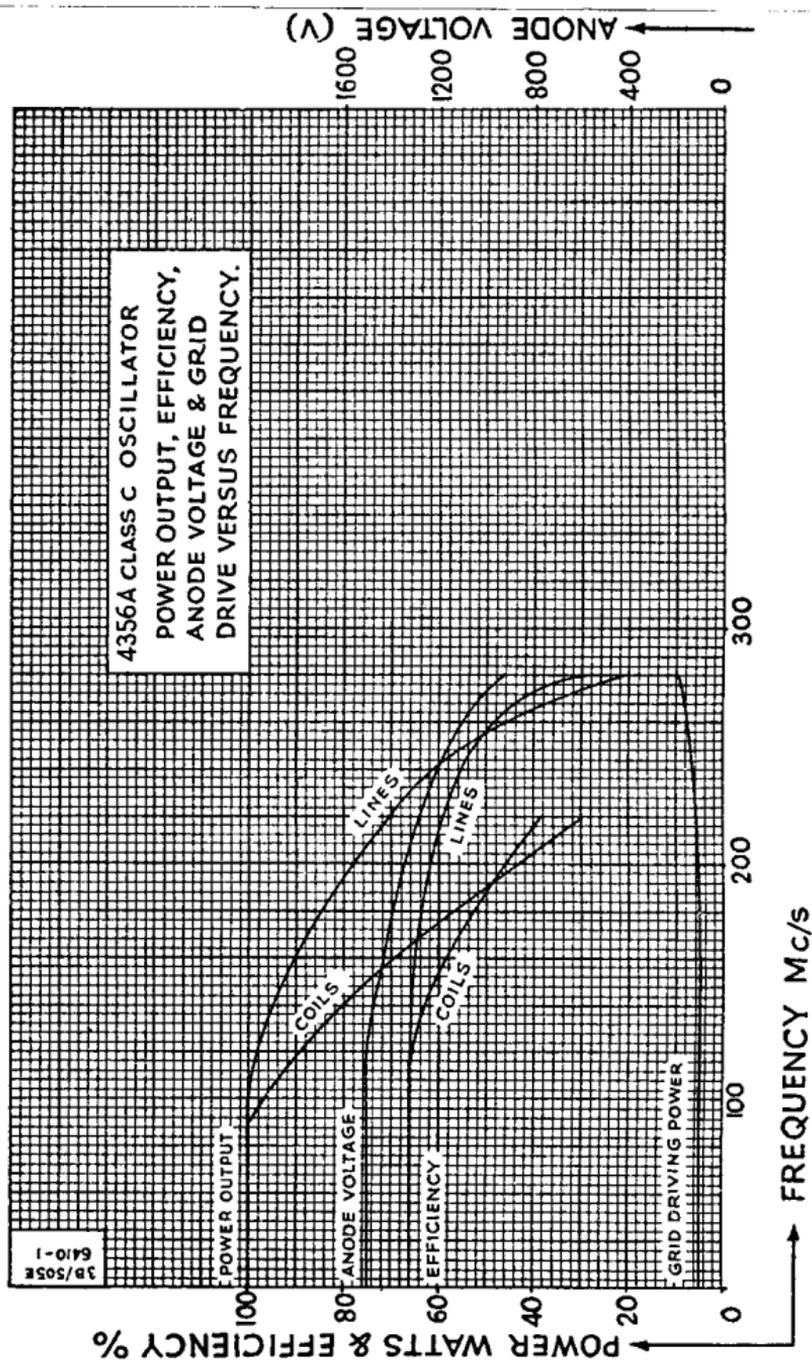


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Tentative data  
January 1946

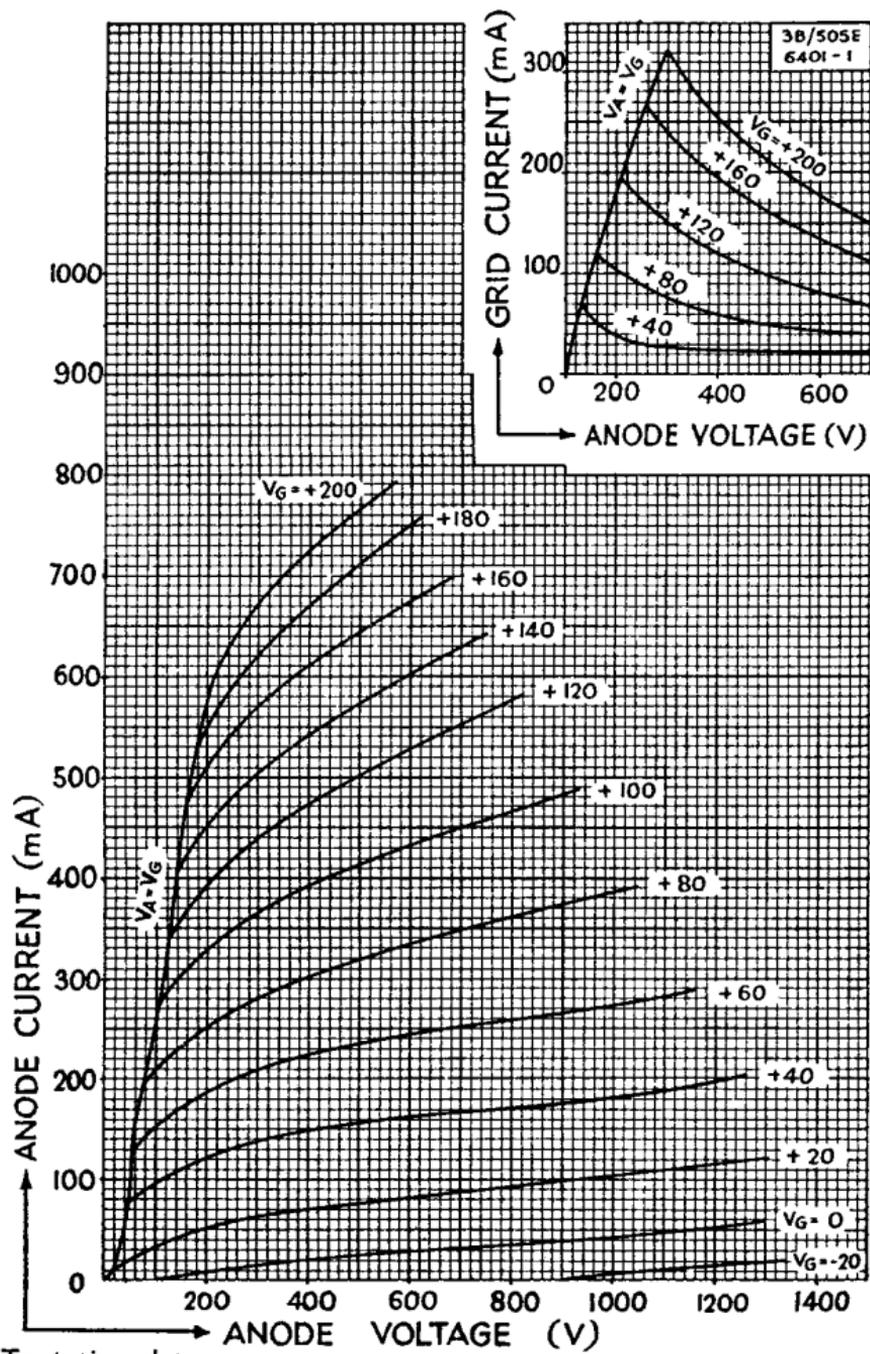
3B/505E-3

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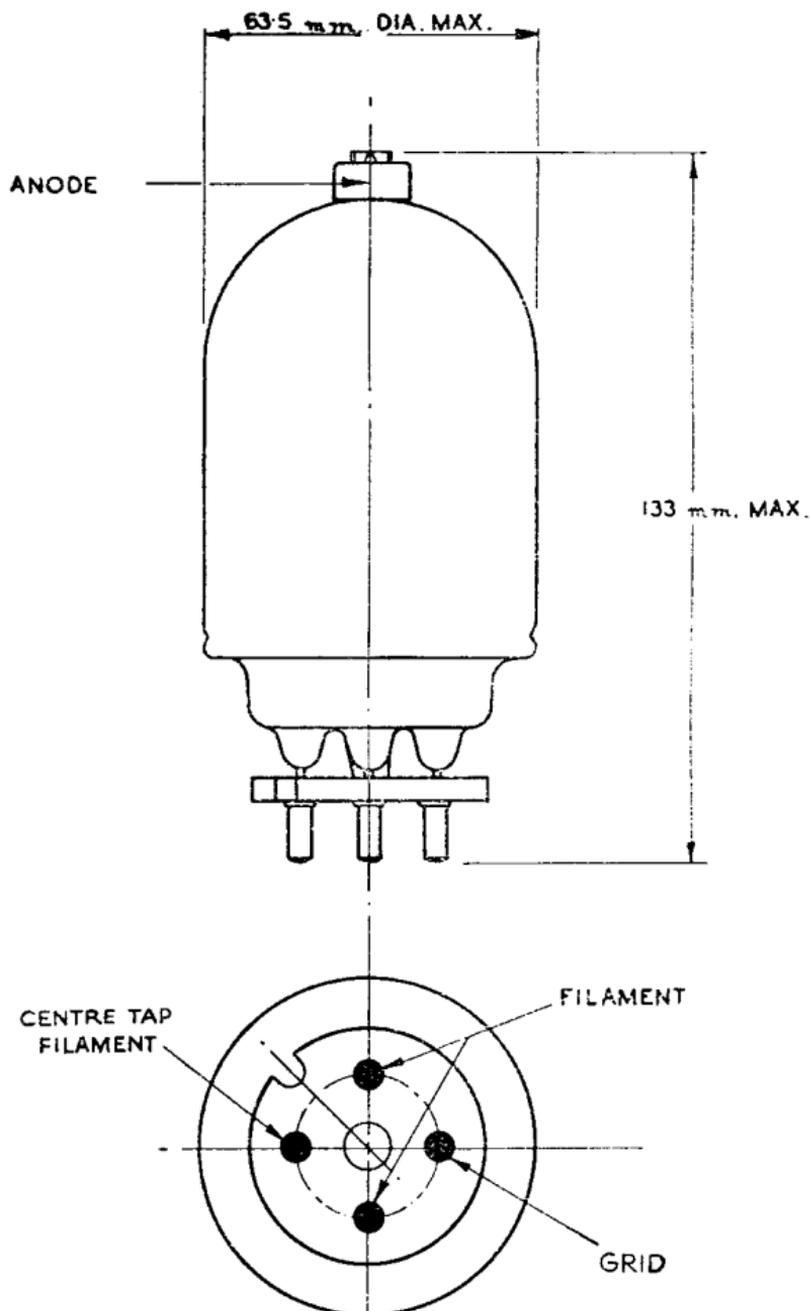


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3B/505E-5